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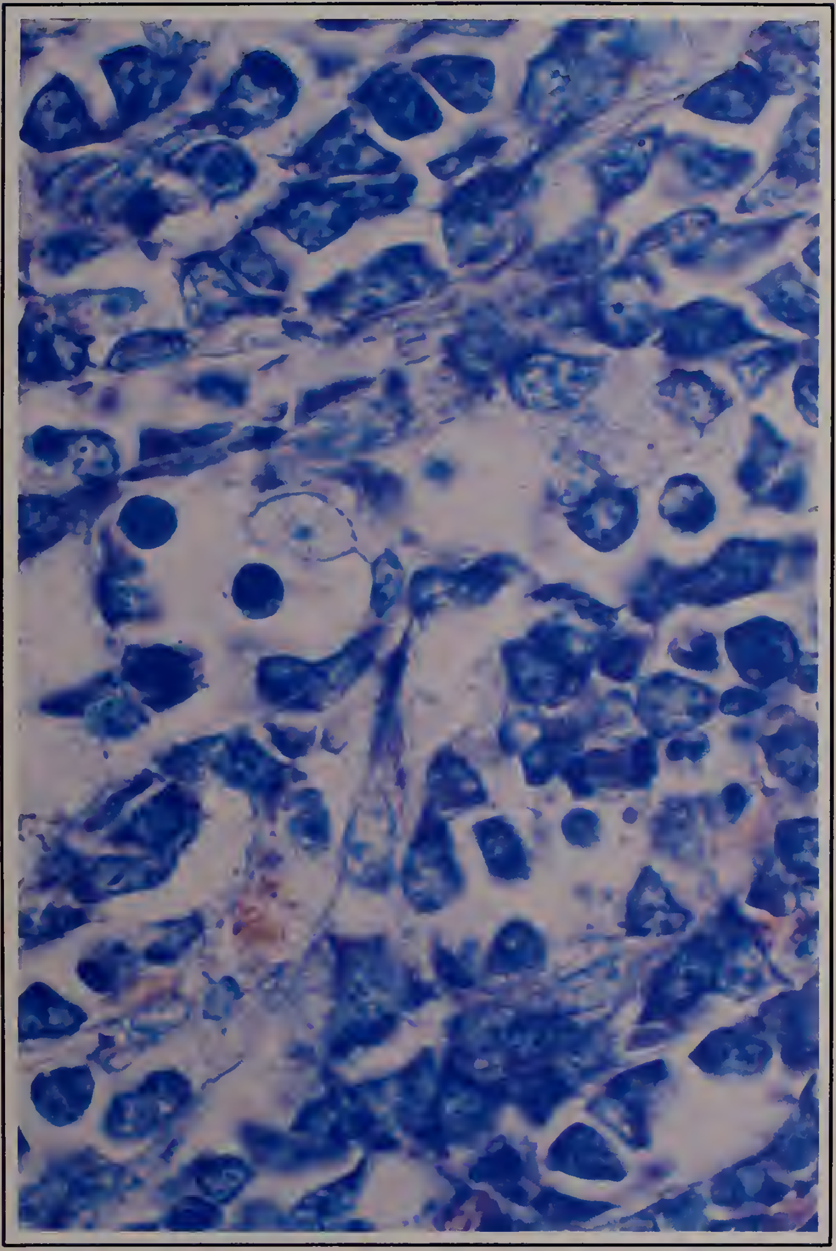

Photomicrograph of the ileocecal valve showing primary lymphoblastic lymphoma. See page 240.

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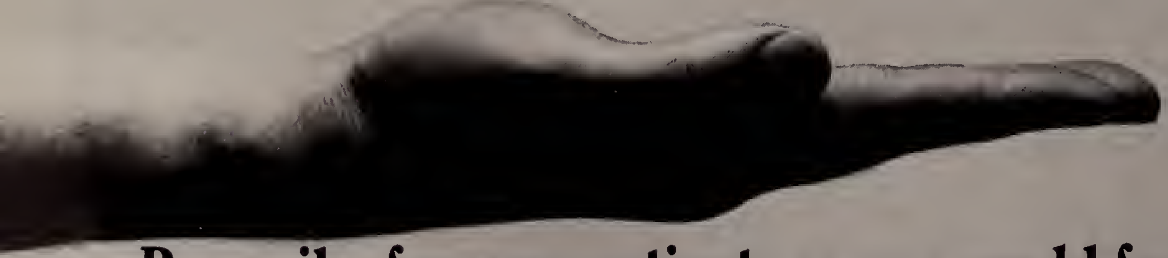

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New Editor of the *Journal*

Alan Blum, M.D., has succeeded Alfred A. Angrist, M.D. as Editor of the *Journal.* Dr. Angrist continues his association with the Society as Editor Emeritus and Editorial Consultant.

Dr. Blum, 34, most recently served as editor of *The Medical Journal of Australia.* He was born in Rockaway Beach, Queens and is the son of the late Leon Blum, M.D., a member of the Society for 37 years. Dr. Blum is a graduate of Amherst College and Emory University School of Medicine. After serving a medical internship at the Royal Victoria Hospital in Montreal, he completed a residency and teaching fellowship in family medicine at the University of Miami. He then received a Morris Fishbein Fellowship in Medical Journalism at *JAMA.* Prior to being named editor of *The Medical Journal of Australia*, he was a lecturer in family medicine at the University of Illinois and a faculty member of the Department of Family Practice at Lutheran General Hospital, Park Ridge, Illinois. He is a fellow of the American Academy of Family Physicians.

Dr. Blum's published works in books and medical journals have focused on preventive medicine, medical education, and the way in which health issues are presented in the mass media. This has led to speaking engagements at more than 40 medical schools and over 200 conferences. In 1977, he founded DOC (Doctors Ought to Care), a coalition of physicians and medical students working with teenagers to counteract cigarette advertising and other promotions of lethal lifestyles.

The New York State Journal of Medicine has now become one of only three peer-reviewed general medical journals in the United States with a full-time physician-editor (*JAMA* and *The New England Journal of Medicine* are the other two). The *Journal* will aim to attract a greater amount of original research and commentary from across the nation, to stimulate a lively letters to the editor column, and to increase its coverage of socioeconomic issues. Resident and student participation will be encouraged. All readers are welcome to propose the names of authors and topics for editorials and other articles to this independent, ecumenical, scientific journal.

Letters to the Editor

Address letters to Editor, **New York State Journal of Medicine**, 420 Lakeville Road, P.O. Box 5404, Lake Success, New York 11042.

The *Journal* welcomes and encourages letters to the editor. Letters should be succinct and precise. Preference for publication will be given to those not exceeding 450 words. Letters must be typewritten and double-spaced, with six or fewer references. The references should be based on the style used in *Index Medicus.* Letters should not duplicate manuscripts or correspondence submitted to other journals, newspapers, or magazines. The signature, academic degree, professional affiliation, and address of each author must be included. Every effort will be made to expedite the publication of accepted letters. All letters are personally acknowledged by the editor.

Teenage drinking

To the Editor: On September 20, 1982, on the *Good Morning America* Television show, a weeklong study of teenage drinking and driving was initiated. At the outset, parents of a young man who was killed in his 17th year while riding as a passenger in a vehicle operated by a drinking friend were asked what they had learned from such a grisly and shocking experience. The father replied that we as parents should teach our children not to drive with a friend who had "too much to drink."

I am dismayed at this message. Alcohol use is associated with the major cause of death in adolescence, and we continue to miss the critical issue: What is "too much to drink?" As adults we have difficulty in answering that question despite many years of personal experience with drinking—both our own and that of others. How can we assign that task to our inexperienced children? More often than not, the judgment is attempted by a young person who has also ingested some alcohol. Is it not time to project an answer that would permit an honest determination by our children: **DO NOT RIDE WITH A DRIVER WHO HAS HAD ANYTHING TO DRINK, EVEN IF THAT DRIVER IS YOU!**

Must we protect drinking behavior to the extent that we sacrifice our youth?

STANLEY E. GITLOW, M.D.
Clinical Professor of Medicine
Mt. Sinai School of Medicine of
the City University of New York

Anal sphincter reconstruction

To the Editor: I am writing to you regarding the paper that was published in the *New York State Journal of Medicine* in the June 1982 issue entitled, "Myocutaneous Flap for Traumatic Anal Incontinence and Reconstruction of Pararectal Defect."

In the second paragraph of page 1067 of the article, the authors state: "The gracilis muscle has been used for either the restoration of anal incontinence or in the reconstruction of soft-tissue deficits in the perineum. However, there is no previous description of the simultaneous use of the GMCU for both functions."

This statement is inaccurate due to the fact that in October of 1981 Dr. Leonard A. Sharzer and myself had a paper published entitled "Anal Sphincter Reconstruction and Perineal Resurfacing with a Gracilis Myocutaneous Flap," which appeared in the journal, *Diseases of the Colon and Rectum.*

In this paper which I have enclosed, there is a detailed description of using the gracilis myocutaneous unit for anal reconstruction and resurfacing of the perineal area after radiation therapy injury. I was also surprised to find that the authors' research did not extend beyond 1977 for their paper.

I would appreciate it if you would inform your readers of this oversight on the part of the authors of this paper so that Dr. Sharzer and I may receive recognition for the work that we performed.

MICHAEL KALISMAN, M.D.
1095 Park Avenue
New York, N.Y. 10028

Toxic shock syndrome in male

To the Editor: I read with much interest the report "Toxic Shock Syndrome in the Male" by Drs. Welch and Beekman (*New York State J Med* 1982; 82:1585–1586). They rightly point out that TSS does occur in the male although tampon use in the female has pushed this fact aside.

I should like to add the case of my son who underwent a nasal septoplasty and was packed with sterile gauze postoperatively. He developed fever, rash, desquamation, profuse diarrhea, delirium and other CNS changes, and hematuria.

(*continued on page 161*)

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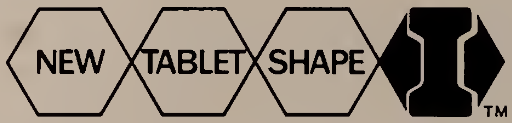

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CONTRAINDICATIONS

1) bronchial asthma, 2) allergic rhinitis during the pollen season, 3) sinus bradycardia and greater than first degree block, 4) cardiogenic shock, 5) right ventricular failure secondary to pulmonary hypertension; 6) congestive heart failure (see WARNINGS) unless it is secondary to a tachyarrhythmia treatable with propranolol, 7) in patients on adrenergic-augmenting psychotropic drugs (including MAO inhibitors), and during the two week withdrawal period from such drugs

WARNINGS

CARDIAC FAILURE In congestive heart failure, inhibition with beta-blockade carries the potential hazard of further depressing myocardial contractility and precipitating cardiac failure In patients already receiving digitalis, propranolol may reduce the positive inotropic action of digitalis and may have an additive depressant effect on AV conduction.

IN PATIENTS WITHOUT A HISTORY OF CARDIAC FAILURE, in rare instances, cardiac failure has developed during propranolol therapy At the first sign of impending cardiac failure, patients should be fully digitalized and/or given a diuretic, and observed closely: a) if cardiac failure continues, despite adequate digitalization and diuretic therapy, propranolol should be immediately withdrawn; b) if tachyarrhythmia is being controlled, patients should be maintained on combined therapy and closely followed until threat of cardiac failure is over

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following *abrupt* discontinuation of INDERAL therapy Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced and the patient carefully monitored In addition, when INDERAL is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease, who are given propranolol for other indications

IN PATIENTS WITH THYROTOXICOSIS, possible deleterious effects from long term use have not been adequately appraised Give special consideration to propranolol's potential for aggravating congestive heart failure Propranolol may mask the clinical signs of developing or continuing hyperthyroidism or complications and give a false impression of improvement Propranolol should be withdrawn slowly, since abrupt withdrawal may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm Propranolol does not distort thyroid function tests

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker In one case this resulted after an initial dose of 5 mg propranolol

IN PATIENTS UNDERGOING MAJOR SURGERY, beta-blockade impairs the ability of the heart to respond to reflex stimuli Except in pheochromocytoma, propranolol should be withdrawn 48 hours prior to surgery In case of emergency surgery, the effects of propranolol can be reversed by administration of beta-receptor agonists such as isoproterenol or levarterenol, but such patients may be subject to protracted severe hypotension Difficulty in restarting and maintaining the heart beat has been reported

IN PATIENTS PRONE TO NONALLERGIC BRONCHOSPASM (e *g* , CHRONIC BRONCHITIS, EMPHYSEMA) administer with caution, since propranolol may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta-receptors

DIABETICS AND PATIENTS SUBJECT TO HYPOGLYCEMIA. Propranolol may prevent the appearance of premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia, especially in patients with labile diabetes A precipitous elevation of blood pressure may accompany hypoglycemic attacks.

USE IN PREGNANCY Safe use in human pregnancy not established Embryotoxic effects have been seen in animals at doses about 10 times the maximum recommended human dose

PRECAUTIONS

Patients receiving catecholamine depleting drugs such as reserpine should be closely observed if propranolol is administered, since it may occasionally produce hypotension and/or marked bradycardia resulting in vertigo, syncopal attacks, or orthostatic hypotension.

Observe laboratory parameters at regular intervals Use with caution in patients with impaired renal or hepatic function

ADVERSE REACTIONS

Cardiovascular bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands; arterial insufficiency, usually of the Raynaud type, thrombocytopenic purpura *Central Nervous System*: lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to catatonia; visual disturbances, hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics *Gastrointestinal* nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis. *Allergic* pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress *Respiratory* bronchospasm *Hematologic* agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura *Miscellaneous* reversible alopecia Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta-blocker (practolol) have not been conclusively associated with propranolol *Clinical Laboratory Test Findings* Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase

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(*continued from page 157*)

Staphylococcus aureus, coagulase-positive and beta-hemolytic, was isolated from his nose.

This case has several features worthy of note:

1. Another case in a male—probably much more common than we think.
2. TSS resulting from the sterile packing of another body cavity.
3. The risk of unusual complications to simple procedures and diseases occur with undue frequency in medical families.

Thank you.

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Acute myeloblastic leukemia and insecticide

To the Editor: We report a patient who developed acute myeloblastic leukemia (AML) following long-term exposure to an insecticide.

Case report. A 66-year-old dealer in old books was hospitalized because of left lobar pneumonia. The last 15 years he worked in a small and unventilated store where he regularly used generous amounts of insecticide aerosol mixture containing lindane, piperonyl butoxide, and pyrethrum in kerosene and xylenes and toluene as solvents. One year prior to admission his peripheral blood count including platelets was normal. The hemoglobin was 10.5 g/dL, the white blood cell count 1×10^9 with 10% neutrophils, 22% band forms, 2% eosinophils, 10% monocytes, and 56% lymphocytes. The platelet count was 70×10^9. Results of bone marrow aspiration and trephine bone biopsy were compatible with marked hypoplastic anemia. The urine contained trace amounts of toluene and xylenes. Treatment with antibiotics and repeated leukocyte transfusions resulted in a gradual improvement. During the next three months his peripheral blood counts remained practically unchanged, except for the hemoglobin which dropped to 7.5 g/dL, necessitating several blood transfusions. Results of a repeat bone marrow aspiration were compatible with aplastic anemia. Despite repeated warnings, the patient continued to use the same insecticide in his bookstore. One month later findings typical of AML appeared and the patient died soon after from septicemia.

Comment. The evolution of the leukemic process may be related to exposure to the insecticide, especially since the patient continued to use the same insecticide during the hypoplastic and aplastic phase. Lindane may cause agranulocytosis, aplastic anemia, and leukemia.[1,2] Benzene is a well-known myelotoxic substance, frequently found as an impurity in solvents such as xylenes, toluene, and kerosene.[3] Piperonyl butoxide was lately demonstrated to act as a carcinogen in rats, when used in aerosols in combination with freon.[4]

The potential leukemogicity of organic solvents should be kept in mind, especially since insecticides are widely used.

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Hereditary hemorrhagic telangiectasia

To the Editor: In the discussion of their case report, Hereditary Hemorrhagic Telangiectasia with no Skin or Mucous Membrane Lesions by Guena and Addei (*NY State J Med* 1982; 82:1595–1596), the authors fail to mention the use of laser in the treatment of this disease.

The laser, in its various forms—argon, CO_2, YAG (yttrium aluminum garnet)—has found application in the treatment and palliation of the telangiectasias and bleeding problems in these patients.[1–3] I have personally treated, via argon laser, the cutaneous telangiectatic lesions in these patients with excellent results and would recommend it as a very worthwhile option.

RENE RODRIGUEZ-SAINS, M.D.
30 East 60th Street
Suite 1504
New York, N.Y. 10022

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February 1983 Volume 83 Number 2

"Dedicated to the continuing education of the physician"

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(*continued from page 161*)

Everybody wants to get into the act

You don't have to be *très* wise
Or even win the Nobel Prize
In order to express a verity
That will go down to posterity

Such a man was James Durante
With education mighty scanty
I quote his famous phrase intact
"Everybody wants to get into the act"

Since paramedics are expanding
Far above their understanding
I now bring these facts to light
That go to prove Durante right

Podiatrists now want to leap
Far above the patient's feet
Let me add this warning tip
They're headed for the patient's hip

Fitting glasses to the eye
Hardly seems to satisfy
Optometrists are now hell bent
Want eyedrops to their armament

Soon PAs from Maine to Texas
Will be writing your RXs
I'm quite sure that their next act is
To tell you how to run your practice

The strangest portion of this tale
Are the followers of Miss Nightingale
Nurses now stand in the wings
Chafing to do "doctor things"
Some have taken the position
To be both nurse and be physician
The butcher, the baker, the candlestick maker
Each has his own way to go
It's true too in "health" where we have a wealth
Of providers with their own road to hoe

And so if we care to give quality care
To the patients that we all treat
Let one stick to one's field, them I'm sure it will yield
A high standard that one cannot beat

So my friends the simple fact is
If you opt for medical practice
Make application—join the pool
And TAKE YOURSELF TO MEDICAL SCHOOL

MARTIN MARKOWITZ, M.D.
525 Neptune Avenue
Brooklyn, New York 11224

Ativan®: (lorazepam) Agent of Change because...

Ativan:
Accumulation to steady state
extends for only 2-3 days.
No active metabolites.
Day 3
depiction of typical blood level
4
3
2
1

shorter acting, less accumulation

Unlike most benzodiazepines, Ativan has a short half-life, no active metabolites, and accumulation to steady state extends for only 2-3 days. Ativan is therefore less likely to cause excessive sedation.[*]

no interaction with drugs metabolized by P450 enzymes

Because it is metabolized by simple conjugation rather than complex oxidative reactions, Ativan does not compete with other drugs for hepatic P450 microsomal enzymes. Concomitant use with Tagamet® (cimetidine), for example, does not result in delayed clearance or increased sedation[†]—effects which have been reported with other benzodiazepines.[1-5]

greater control of therapy

The short half-life of Ativan facilitates more rapid response to dosage adjustments, aiding you in titrating therapy to the patient's changing needs. Once you decide to discontinue Ativan, it will be out of your patient's system 4 days after the final dose—unlike the long-acting, multi-metabolite benzodiazepines which take as long as 2 weeks to be totally eliminated.

Wyeth Laboratories
Philadelphia, PA 19101

References:
1 Klotz U, Reimann I: N Engl J Med *302*:1012-1014, 1980.
2 Desmond PV, Patwardhan RV, Schenker S, et al: Ann Intern Med *93*:266-268, 1980.
3 Patwardhan RV, Yarborough GW, Desmond PV, et al: Gastroenterology *79*:912-916, 1980.
4 Sellers EM, Naranjo CA, Peachey JE: N Engl J Med *305*:1255-1262, 1981.
5. Ruffalo RL, Thompson JF, Segal JL: South Med J *74*:1075-1078, 1981

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[*] Pharmacokinetics cannot as yet be directly related to efficacy.

[†] All benzodiazepines produce additive effects when given with CNS depressants such as barbiturates or alcohol.

See important information on following page.

Ativan®
for (lorazepam) Ⓒ IV
Anxiety

Brief Summary of Prescribing Information.

Indications and Usage: Management of anxiety disorders or short-term relief of symptoms of anxiety or anxiety associated with depressive symptoms. Anxiety or tension associated with stress of everyday life usually does not require treatment with an anxiolytic.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

Ativan®
for (lorazepam)Ⓒ
Anxiety

Dosage: **Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; Insomnia due to anxiety or transient situational stress, 2-4mg h.s.**

How Supplied: **0.5, 1.0 and 2.0mg tablets.**

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Philadelphia, PA 19101

Medical News

Material for inclusion in medical news section must be received eight weeks prior to publication date.

AMA appointment

The American Medical Association has appointed William E. Small as Director of its new Department of Media and Information Services in the Washington, D.C., office.

The New York Academy of Medicine names medalist recipient and lecturer

Seymour S. Kety, M.D., one of the world's foremost researchers in schizophrenia has been named recipient of the 1982 Thomas W. Salmon Medal for outstanding, meritorious service in psychiatry by the Salmon Committee on Psychiatry and Mental Hygiene. The award, one of the most prestigious in the field of psychiatry, was announced at the annual Thomas William Salmon Lecture held on December 2, at the Academy.

Louis Sokoloff, M.D., a neuroscience pioneer who developed a new method to measure the brain's metabolic activity, was the annual speaker in the distinguished lecture series, which began in 1932. Dr. Sokoloff spoke on "The Localization of Functional Activity by Measurement of Local Metabolic Processes in the Nervous System" and "Applications of Metabolic Mapping to Neurology and Psychiatry."

NIA nursing home grants awarded

HHS Secretary Richard S. Schweiker announced the first two National Institute on Aging teaching home grants totaling $7.43 million over five years. The grants are awarded to support research on geriatric health problems in a nursing home setting.

A goal of the teaching nursing home program is to increase the understanding of chronic health problems that often lead to older people being placed in institutions. Many of these problems, including senile dementia, incontinence, osteoporosis, depression, and sleep disorders are often not treated in hospitals and have not been the subject of extensive biomedical research.

The chronic care facilities to be involved under the grant to the Albert Einstein College of Medicine are Beth Abraham Hospital, Morningside House Nursing Home, and the Hebrew Home for the Aged. The participating institutions are Albert Einstein College Hospital, Bronx

Municipal Hospital, Montefiore Medical Center, and the College of Mt. St. Vincent. The principal investigator, Robert Katzman, M.D., is professor and chairman of neurology at the Albert Einstein College of Medicine.

Budget cuts to nursing jeopardize future health care

The ability of the nursing profession to adequately staff health care facilities in the upcoming years is jeopardized by cuts in federal funding for nursing, according to Mary Hale, president, National Student Nurses' Association, Inc. Over 60% of nursing students responding to a recent association survey receive federal aid, and 74% would be unable to continue nursing school without that aid, she said.

Over 70% of the students families earn less than $25,000. She warns that "If federal aid to nursing is cut, many students of nursing will be forced to drop out of school or attend part-time."

1983–1984 Diabetes research grants available

The Juvenile Diabetes Foundation announces the availability of grants in diabetes research for the funding year July 1, 1983 to June 30, 1984. Each grant application is subject to scientific peer review by the medical Science Advisory Board and approval by the International Board of Directors. These bodies evaluate the scientific and medical merit of the application; the qualifications, experience and productivity of the investigators; the facilities available; and the relationship of the research to the cause, prevention and cure of diabetes and its complications. Completed applications must be received not later than March 1, 1983.

Applications may be obtained from: Grant Administrator, Juvenile Diabetes Foundation, 23 East 26th Street, New York City, 10010. Area code 212-889-7575.

Center for Northeast drug program chosen

The New York State College of Veterinary Medicine at Cornell University has been selected as the Center for a new program designed to serve the pharmaceutical needs of minor food species which are economically important to the Northeast.

Currently funded for five years by the Department of Agriculture, the Center at Cornell will be one of four across the country. John Babish, M.D., assistant professor in the Department of Preventive Medicine at the College has been selected as the Northeast Regional Animal Drug Coordinator. In this capacity, he will coordinate the re-

(continued on page 170)

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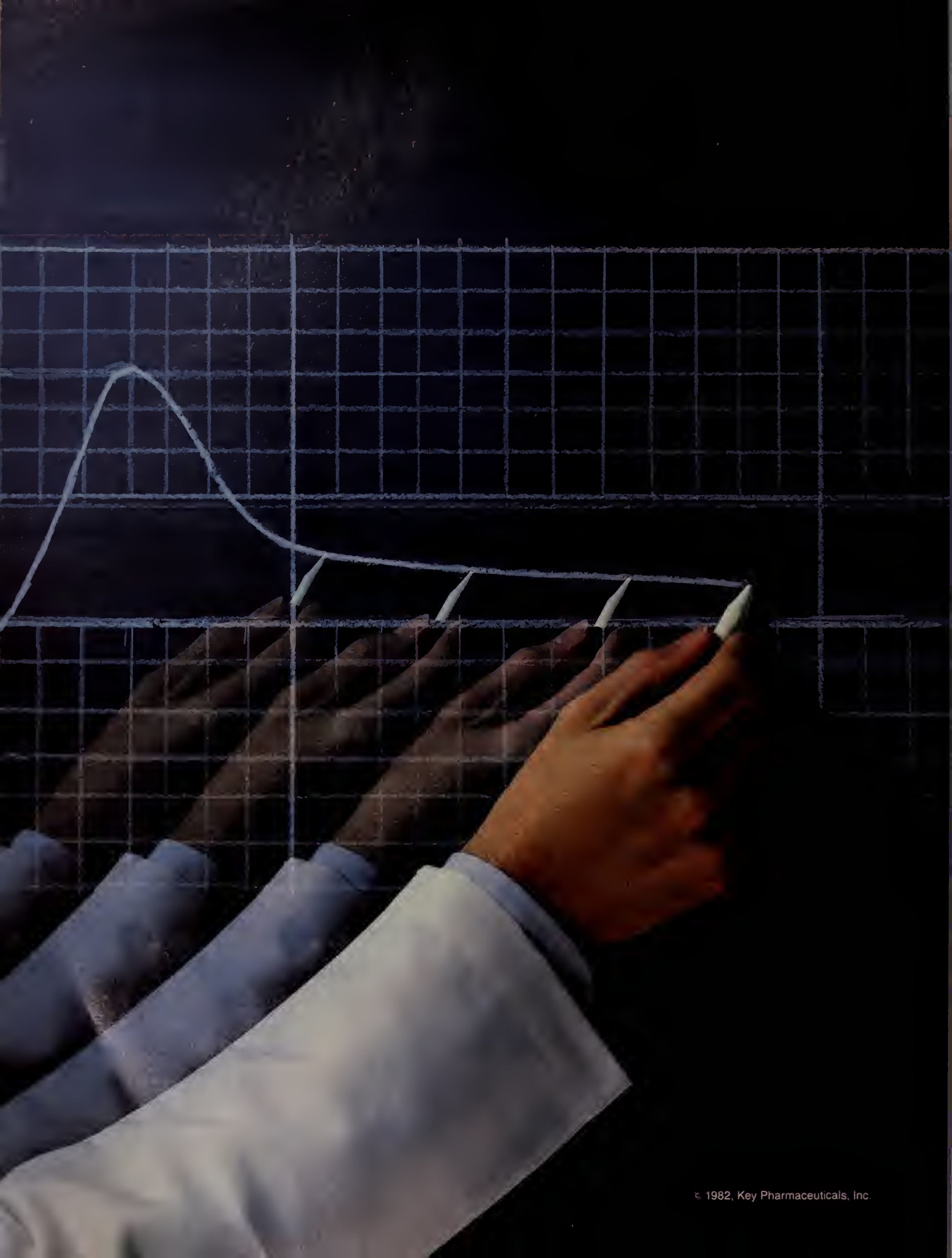

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We straightened out the problem of theophylline blood levels.

THEO-DUR® (anhydrous theophylline)—
The first and only form of oral theophylline to demonstrate linear blood levels for a full 12 hours in virtually all patients, even those who are rapid metabolizers.

Until THEO-DUR, blood levels from rapid acting and sustained action theophyllines generally showed unacceptably wide peak-trough fluctuations. This meant the drug was difficult to maintain in the therapeutic range and difficult to sustain in that range for more than a few hours.

For most patients, the therapeutic range of theophylline falls somewhere between 10 and 20 mcg/ml. When serum concentrations fall much below 10, they are often ineffective. When they go much above 20, they are usually toxic.

Now, with THEO-DUR, you can provide your patient with maximum theophylline protection and avoid theophylline failure.

And, since THEO-DUR can maintain therapeutic blood levels for a full 12 hours, patients can enjoy a full day of normal activities and a night of uninterrupted sleep.

Zero-order THEO-DUR—a unique form of oral theophylline.

THEO-DUR provides zero-order drug absorption. The theophylline is absorbed into the blood at an essentially constant quantity per hour.

Other oral forms of theophylline have first-order absorption, in which the largest amount is absorbed in the first hour and proportionately smaller amounts thereafter.

When absorption varies, as it does with first-order drugs, protection can also vary. That's why first-order theophyllines can be toxic within the first few hours and subtherapeutic later on.

THEO-DUR—the practical benefits.

Your patient benefits from the maximum control provided by THEO-DUR in several important ways: exercise tolerance is increased, emergency hospital visits are less likely and concomitant therapy is usually unnecessary.

Dosage titration is easy to achieve.* THEO-DUR is the only sustained action tablet in 200 mg as well as 100 and 300 mg strengths and all tablets are scored for greater dosage flexibility.

THEO-DUR also enhances patient compliance—with an every 12-hour dosage schedule that's easier to remember.

**After three days, on a steady dose, serum concentrations should be monitored and appropriate dosage adjustments made, if necessary.*

Today's most widely prescribed bronchodilator.

THEO-DUR®
(anhydrous theophylline)
Sustained Action Tablets

Please see next page for a summary of prescribing information.

THEO-DUR®
(anhydrous theophylline)
Sustained Action Tablets

Today's most widely prescribed bronchodilator.

Description: THEO-DUR Sustained Action Tablets contain anhydrous theophylline, with no color additives
Pharmacologic Actions: The pharmacologic actions of theophylline are as a bronchodilator, pulmonary vasodilator and smooth muscle relaxant since the drug directly relaxes the smooth muscle of the bronchial airways and pulmonary blood vessels. Theophylline also possesses other actions typical of the xanthine derivatives coronary vasodilator, diuretic, cardiac stimulant, cerebral stimulant and skeletal muscle stimulant. The actions of theophylline may be mediated through inhibition of phosphodiesterase and a resultant increase in intracellular cyclic AMP which could mediate smooth muscle relaxation.
Indications and Usage: Symptomatic relief and/or prevention of asthma and reversible bronchospasm associated with chronic bronchitis and emphysema
Contraindications: THEO-DUR is contraindicated in individuals who have shown hypersensitivity to any of its components or xanthine derivatives.
Warnings: Excessive theophylline doses may be associated with toxicity, serum theophylline levels should be monitored to assure maximum benefit with minimum risk. Incidence of toxicity increases at serum levels greater than 20 mcg/ml. High blood levels of theophylline resulting from conventional doses are correlated with clinical manifestation of toxicity in: patients with lowered body plasma clearances, patients with liver dysfunction or chronic obstructive lung disease, and patients who are older than 55 years of age, particularly males There are often no early signs of less serious theophylline toxicity such as nausea and restlessness, which may appear in up to 50% of patients prior to onset of convulsions. Ventricular arrhythmias or seizures may be the first signs of toxicity. Many patients who have higher theophylline serum levels exhibit a tachycardia. Theophylline products may worsen pre-existing arrhythmias
Usage in Pregnancy: Safe use in pregnancy has not been established relative to possible adverse effects on fetal development, but neither have adverse effects on fetal development been established This is, unfortunately, true for most anti-asthmatic medications. Therefore, use of theophylline in pregnant women should be balanced against the risk of uncontrolled asthma.
Precautions: THEO-DUR TABLETS SHOULD NOT BE CHEWED OR CRUSHED. Theophyllines should not be administered concurrently with other xanthine medications It should be used with caution in patients with severe cardiac disease, severe hypoxemia, hypertension, hyperthyroidism, acute myocardial injury, cor pulmonale, congestive heart failure, liver disease, and in the elderly, particularly males, and in neonates. Great caution should be used in giving theophylline to patients in congestive heart failure since these patients show markedly prolonged theophylline blood level curves. Use theophylline cautiously in patients with history of peptic ulcer. Theophylline may occasionally act as a local irritant to G.I. tract, although gastrointestinal symptoms are more commonly central and associated with high serum concentrations above 20 mcg/ml.
Adverse Reactions: The most consistent adverse reactions are usually due to overdose and are:
Gastrointestinal: Nausea, vomiting, epigastric pain, hematemesis, diarrhea
Central Nervous System. Headaches, irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions
Cardiovascular Palpitation, tachycardia, extrasystoles, flushing, hypotension, circulatory failure, life threatening ventricular arrhythmias
Respiratory: Tachypnea
Renal: Albuminuria, increased excretion of renal tubular cells and red blood cells, potentiation of diuresis
Others: Hyperglycemia and inappropriate ADH syndrome
How Supplied: THEO-DUR 100 mg, 200 mg and 300 mg Sustained Action Tablets are available in bottles of 100, 500, 1000, and 5000, and in unit dose packages of 100.
Caution: FEDERAL LAW PROHIBITS DISPENSING WITHOUT A PRESCRIPTION
For full prescribing information, see package insert
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(*continued from page 167*)

search leading to FDA approval of candidate drugs for the thirteen states of the Northeast region.

Call for papers

The American Society of Clinical Pathologists will provide a forum for pathologists, pathology residents, and other laboratory medicine professionals from universities, hospitals, medical centers, and government to exchange information and ideas in the fields of anatomic and clinical pathology and laboratory medicine. These papers and posters will be presented at the ASCP/CAP Fall National Meeting, October 14 to 22, 1983, to be held in St. Louis, Missouri. Deadline for submission is June 15, 1983. For guidelines and an abstract submission form, contact: ASCP Manager for Scientific Assemblies, 2100 West Harrison, Chicago, Illinois 60612, or call: 312-738-1336, ext. 185.

'Throat gonorrhea' in teens

Gonorrhea of the pharynx, or throat, may be as common in adolescents as in adults, according to newly published research that suggests circumstances under which teens should be tested for the disease. Infection from pharyngeal gonorrhea can spread through the blood system. Little has been known previously about the frequency of this form of the disease, although it is increasing among adults. Pharyngeal gonorrhea is associated with oral-genital sex, although some patients have indicated that "deep" or "French" kissing may have been their source of the disease.

Funds awarded to combat AIDS/Kaposi's sarcoma

Five New York City area medical research projects aimed at combating the devastating effects of Acquired Immune Deficiency Syndrome (AIDS), have been awarded research grants totalling more than $30,000 by Gay Men's Health Crisis (GMHC), it was announced here today.

Listing of institutions-research staff

St. Luke's-Roosevelt Hospital Center, Michael Lange, M.D. $22,400

The Mt. Sinai Medical Center, Frederick P. Siegel, M.D.; Memorial Sloan-Kettering Cancer Center, Carlos Lopez, Ph.D.; UCLA Medical Center, Michael S. Gottlieb, M.D. $5,250

Memorial Sloan-Kettering Cancer Center, Susanna Cunningham-Rundles, Ph.D.; Metropolitan Hospital Center, William H. Stahl, M.D. $5,250

(*continued on page 186*)

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Compliance With Mammography Referrals

*Implications for breast cancer screening**

DOROTHY S. LANE, M.D., M.P.H.[a]
HERBERT L. FINE, Ph.D.[b]
Patchogue, New York

[a] Associate Professor of Community and Preventive Medicine, School of Medicine, State University of New York at Stony Brook; and Chairman, Department of Community Medicine, Brookhaven Memorial Hospital Medical Center.
[b] Research Associate, Department of Community Medicine, Brookhaven Memorial Hospital Medical Center.

Among 1,822 women who participated in a breast cancer screening project, 561 were referred for mammography following National Cancer Institute criteria, and 44.6% of these complied with this referral. Changing federal funding policy permitted project payment for mammography for roughly one half of the referrals, creating a natural experiment for exploring the influence of cost on compliance. To understand the variations in compliance behavior, statistical comparisons were made between women who obtained mammography and those who did not on a variety of variables, and the subgroups of asymptomatic and symptomatic women were examined separately. Significant relationships were found between compliance and the self-reporting of breast symptoms, the physical findings on physical examination, and the source of payment for mammography. The interaction between these three variables is described. Compliance rates ranged from a low of 7.6% for women who were asymptomatic with normal examination findings and who had to pay for mammography to 92.5% for women who were symptomatic with abnormal findings who had mammography free of charge. Preliminary evidence suggests that public awareness of radiation hazards may play a role in patient noncompliance.

There is a general consensus that mammography is a valuable screening method for the detection of breast cancer when used in conjunction with physical examination in women who meet specific age and medical history criteria.[1–6] In a carefully controlled study conducted by the Health Insurance Plan of Greater New York (HIP) there was a clearly demonstrated one-third reduction in mortality from breast cancer in mammographically screened women over the age of 50 after nine years of follow-up.[5,6] These findings were supported by the experience of the Breast Cancer Demonstration Projects, conducted under the combined auspices of the National Cancer Institute (NCI) and the American Cancer Society (ACS).[1–5]

Although the purpose of screening efforts is to detect early breast cancer in asymptomatic women, experience has indicated that approximately 7% to 30% of women coming to breast cancer screening projects have symptoms of breast disease at the time of screening.[3,6] The availability of screening has in fact been found to result in a high degree of selectivity in regard to who decides to participate, and has indicated that screenees constitute a high-risk group for breast cancer.[3,7] Not unlike the situation in the private office, therefore, community screening programs refer for mammography a heterogeneous group of women. For some the indication for mammography is as a further diagnostic work-up of a suspicious lesion and for others it is ordered for screening purposes in a high-risk group (ie, over 50 years) with no apparent clinical evidence of pathologic condition. While large cancer screening centers usually have equipment on site to perform mammography, this is frequently not the case in community hospitals, health centers, or physicians' offices where the bulk of breast cancer screening occurs.

Setting

The study included women who attended a breast and uterine cancer screening program conducted by the Department of Community Medicine of a 350-bed voluntary hospital. Funding for the program came from a subcontract with the Long Island Cancer Council, Inc., a nonprofit organization funded by the National Cancer Institute's community-based cancer control program. The screening sessions were held

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* This work was supported by the National Cancer Institute under the Long Island Cancer Council, Inc. contract NO1CN-75389, subcontract no. CBCCP7-11.

at the hospital or in either of two neighborhood health centers operated by the hospital on a contract with the Suffolk County Department of Health Services. Referrals for mammography were based on NCI criteria consistent with the recommendations of the Working Group to review the NCI-ACS projects that advised routine screening mammography for: (1) all women 50 years of age and older; (2) women aged 40 to 49 years having a personal history of breast cancer or a history of breast cancer in first-degree relatives; and (3) women aged 35 to 39 having a personal history of breast cancer.[3]

Because there is no mammography equipment at the hospital or health centers, women were referred to private radiologists in the community for the examination. For a limited period, federal funding permitted the project to pay for the mammographic examination. When this was no longer authorized, women had to pay the radiologist directly. This provided a natural experiment for exploring the influence of cost on obtaining mammography.

Methods

The sample consisted of the 561 women who were referred for mammography during screening sessions conducted from May 31, 1978 to December 11, 1980. The sample represented 30.8% of a total of 1,822 women screened. Data on history, clinical findings, and follow-up outcome were analyzed to explore the relationship between compliance with mammography referral and patient characteristics, practices, and physical findings. The subgroups of asymptomatic and symptomatic women were examined separately and differences between compliers and noncompliers were tested for significance using a simple chi-square analysis.

Because of the low level of compliance during the period that the project paid for mammography, a follow-up telephone survey of noncompliers was conducted in an effort to identify motivational and attitudinal factors other than cost that might explain noncompliance. Noncompliers for project-paid mammography were asked to indicate which factors in a series contributed to their decision not to go for mammography. Data were obtained from 81.7% of those surveyed. Findings from this survey must be interpreted with caution because of the methodologic limitations of the retrospective approach, ie, the effects of time on patient recall are uncertain.

Findings

Sociodemographic characteristics. Of the 561 women referred for mammography, 250 had the examination and 311 did not, indicating an overall compliance rate of 44.6%. The women in the sample were typically over the age of 50 (mean age was 56.3 years), white (94.9%), married (71.5%), and Catholic (56.3%). About one-half reported a family income of under $10,000 and only 12.2% were in the over $20,000 income category. The modal educational level was of a high school graduate. None of the sociodemographic variables were found to be significantly related to compliance.

Health history. Neither a personal nor family history of breast cancer were found to be related to compliance. Only nine women (1.5%) reported a personal history of breast cancer, so that this group was too small for statistical analysis. Eighty-eight women (15.7%) reported a history of breast cancer among first-degree relatives.

Symptoms and signs of breast disease. Among the 561 women who were referred for mammography, 24.6% reported the presence of one or more symptoms of breast abnormality within the previous year. The most common symptom was pain (46.8%) followed by a lump (23.4%). As displayed in Table I, there was a significantly higher rate of compliance among women who reported symptoms of breast disease (65.9%) than among asymptomatic women (37.6%). Within the subgroup of symptomatic women, the rate of compliance of those reporting a lump was not significantly different from the rate of compliance of those reporting other symptoms (χ^2, 1.59). In addition, as illustrated in Table I, there was a significantly higher rate of compliance among women with positive breast findings (69.6%) than among women with normal results of breast examination (29.9%).

The interaction between patient symptoms and physical findings is illustrated in Table II, and indicated that, independent of examination findings, symptomatic women exhibited significantly greater compliance than asymptomatic women.

Cost and compliance. There was a significantly

TABLE I. Compliance with Mammography Referral *v* Symptoms and Signs of Breast Disease

Symptoms and Signs	Total Sample n	Total Sample %	Noncompliers n	Noncompliers Compliance Rate	Compliers n	Compliers Compliance Rate	Significance χ^2 (df = 1)	Significance *P*
Symptoms of breast abnormality								
No	423	75.4	264	62.4	159	37.6	33.86	<.001
Yes	138	24.6	47	34.1	91	65.9		
Breast examination findings								
Normal	354	63.1	248	70.1	106	29.9	83.00	<.001
Abnormal	207	36.9	63	30.4	144	69.6		

TABLE II. Interaction of Self-Reported Symptoms and Breast Examination Findings in Compliance With Mammography Referral

Symptoms and Signs	Total Sample n	Total Sample %	Noncompliers n	Noncompliers Compliance Rate	Compliers n	Compliers Compliance Rate	Significance χ^2 (df = 1)	Significance P
Asymptomatic, normal findings	303	54.0	221	72.9	82	27.1	8.32	<.005
Symptomatic, normal findings	51	9.1	27	53.0	24	47.0		
Asymptomatic, abnormal findings	120	21.4	43	35.8	77	64.2	3.93	<.05
Symptomatic, abnormal findings	87	15.5	20	23.0	67	77.0		

higher rate of compliance among women whose mammography was paid for by the project (53.6%) than among women who paid for the examination themselves (32.6%) (χ^2, 24.47, P <.001). Further analysis by income group showed that the impact of project-paid mammography on improving the compliance rate was inversely related to income.

All combinations of the three variables are displayed in Table III. One can see that in the subgroups of women who were asymptomatic with either normal or abnormal physical findings, or symptomatic with abnormal findings, compliance was significantly greater when mammography was project-paid rather than participant-paid. Compliance ranged from a low of 7.6% for women who were asymptomatic with normal examination findings and who had to pay for mammography to a high of 92.5% for women who were symptomatic with abnormal examination findings and had mammography free of charge. The impact of cost on compliance was most significant in the asymptomatic women with normal examination findings (χ^2, 36.98, P <.001).

Outcome of compliance. Of the 250 women who complied with mammography referral, 104 had a normal mammogram, 142 had mammographic evidence of benign breast disease, and 38 were referred for additional clinical examination. All those referred for further follow-up were subsequently seen by either a surgeon or their regular family physician. Ten had a biopsy and four of these were found to have breast cancer leading to a mastectomy. The surgical pathology reports at the time of mastectomy indicated that none of these four women had evidence of nodal involvement.

The project also yielded two additional cases of breast cancer in women who were not referred directly for mammography and, therefore, were not included in the study sample. Because their physical findings were highly suspicious of cancer, they were referred directly to a surgeon. Mammograms subsequently performed on these two women prior to surgery were consistent with malignant condition. At mastectomy, one of them had evidence of nodal involvement and the other did not.

The results of the survey of noncompliers for project-paid mammography indicated that one factor, "I felt that the mammography was risky, or that the radiation presented a possible health hazard," was cited by almost two thirds of the respondents. More than one fourth of the respondents reported being advised by a physician, relative, or friend not to have the mammography. Approximately one fifth of the respondents indicated that the mammography was not adequately explained to them and/or that they were not convinced by the staff at the screening that they should have mammography. Finally, one fifth of the respondents cited matters of inconvenience such as not having the time to spare or not having transportation to go for the mammographic examination.

Comment

Motivation for preventive as well as curative care has been described in terms of the Health Belief Model (HBM).[8,9] This conceptual model proposes that whether or not an individual will undertake a recommended health action depends on that indi-

TABLE III. Compliance With Mammography Referrals by Symptoms, Signs, and Cost

Symptoms	Signs	Cost	Total Sample n	Total Sample %	Noncompliers n	Noncompliers Compliance Rate	Compliers n	Compliers Compliance Rate	Significance χ^2 (df = 1)	Significance P
−	−	+	118	21.0	109	92.4	9	7.6	36.98	<.001
−	−	0	185	33.0	112	60.5	73	39.4		
+	−	+	12	2.1	7	58.3	5	41.7	0.18	NS
+	−	0	39	6.9	20	51.3	19	48.7		
−	+	+	65	11.6	30	46.2	35	53.8	6.57	<.025
−	+	0	55	9.8	13	23.6	42	76.4		
+	+	+	47	8.4	17	36.2	30	63.8	10.03	<.005
+	+	0	40	7.1	3	7.5	37	92.5		
Totals			561	100.0	311	55.4	250	44.6		

Key: Symptoms and signs: + = present; − = absent
Costs: + = participant-paid; 0 = project-paid

vidual's perceptions of personal susceptibility, severity of the consequences of the disease, and potential benefits of and barriers to the health action. In general, the findings of our study are consistent with this model, although the factors that we have explored were limited. The finding that symptomatic women had significantly higher rates of compliance with mammography referral fits the HBM view of symptoms as an internal cue to action which would be expected to influence the woman's perception of her personal susceptibility to cancer. The important role of the physician in patient compliance with follow-up recommendations is clear. In our study, a very powerful factor in patient compliance was the physician's findings on physical examination. Obviously, detection followed by patient education and information about positive findings are initial steps in promoting compliance among the population of women who are suspicious of having cancer. The low compliance rate among asymptomatic women with normal examination results points to a need for physicians to improve the motivation of this group. A strategy suggested by the HBM is to give greater emphasis to the potential benefits of mammography. The survey findings additionally suggest that for this to occur there may be a need for continuing medical education to disseminate current criteria for the use of mammography as well as information about advances in technology that have reduced the level of radiation exposure.

Cost can be viewed according to the HBM as a barrier to action. The role of financial factors in obtaining such diagnostic screening studies was highlighted in our findings. It would appear that the availability of mammography equipment at the time and place and as a part of the package of initial screening is most desirable for the success of breast cancer screening efforts.

The finding that there is a public awareness, and possibly fear, of a radiation hazard from mammography is not unique to our survey.[7,10] Using the HBM these beliefs can be viewed as a psychologic barrier to complying with the advocated behavior. Further prospective study is needed, however, to document the role of this and other motivational and attitudinal factors in patient compliance.

The less than complete compliance of symptomatic women is of obvious serious concern. Reports from broader-scoped cancer screening efforts have also indicated that a significant proportion of screenees showing positive findings did not report any follow-up care or evaluation.[11] Comparative studies with the outcome of referral from private physicians' offices would be an area for future research in determining if continuity of care improves compliance with mammography referral. Whether the practice of referring for screening mammography, as recommended, is widespread in the private office is also at present unknown, and it is likely that the bulk of women referred from this setting either have symptoms or a palpable lump. The significant differences in compliance among women referred for screening versus for diagnostic mammography would therefore make it necessary to examine these groups separately in any study comparing compliance between referrals from a screening program versus the private office.

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An added complication... in the treatment of bacterial bronchitis*

Increasing incidence of ampicillin resistance in Haemophilus influenzae
Ampicillin Resistant Haemophilus influenzae
H. influenzae
S. pneumoniae

Brief Summary. Consult the package literature for prescribing information

Indications and Usage. Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy particularly to drugs

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins), therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics Such colitis may range in severity from mild to life-threatening

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone In moderate to severe cases, management should include sigmoidoscopy appropriate bacteriologic studies, and fluid electrolyte and protein supplementation When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C difficile* Other causes of colitis should be ruled out

Precautions: *General Precautions*—If an allergic reaction to Ceclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents e g pressor amines, antihistamines or corticosteroids

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms Careful observation of the patient is essential If superinfection occurs during therapy, appropriate measures should be taken

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition it should be recognized that a positive Coombs test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly)

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease particularly colitis

Usage in Pregnancy—Pregnancy Category B—Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor There are however, no adequate and well-controlled studies in pregnant women Because animal reproduction studies are not always predictive of human response this drug should be used during pregnancy only if clearly needed

Nursing Mothers—Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses Average levels were 0 18, 0 20, 0 21 and 0 16 mcg/ml at two, three four and five hours respectively Trace amounts were detected at one hour The effect on nursing infants is not known Caution should be exercised when Ceclor® (cefaclor, Lilly) is administered to a nursing woman

Usage in Children—Safety and effectiveness of this product for use in infants less than one month of age have not been established

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below

Gastrointestinal symptoms occur in about 2 5 percent of patients and include diarrhea (1 in 70)

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment Nausea and vomiting have been reported rarely

Hypersensitivity reactions have been reported in about 1 5 percent of patients and include morbilliform eruptions (1 in 100) Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor Such reactions have been reported more frequently in children than in adults Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy No serious sequelae have been reported Antihistamines and corticosteroids appear to enhance resolution of the syndrome

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients)

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician

Hepatic—Slight elevations of SGOT, SGPT or alkaline phosphatase values (1 in 40)

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40)

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200)

(061782R)

Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

Ceclor®
cefaclor

Pulvules®, 250 and 500 mg

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*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S pneumoniae* or *H influenzae*[8]

Note Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever See prescribing information

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Insulin, Glucagon, and Growth Hormone in Premature Infants

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Plasma insulin, glucagon, and growth hormone were measured at 0–12, 13–24, 25–48, 49–72, and 73–96 hours of age, and were compared to birth weight above or below 1,000 g, gestational age above or below 32 weeks, size appropriate or small for gestational age, and the presence of chronic intrauterine stress, perinatal asphyxia, CNS hemorrhage, and mortality in 31 premature infants. Clinical care was not altered for this study. Plasma insulin very often was undetectable (85.2%). As opposed to insulin, plasma glucagon was detected in most of the samples (75.4%). Plasma levels of insulin and glucagon were not related to the various clinical conditions other than the birth weight. Infants ⩽ 1,000 g more often had measurable levels of insulin and glucagon than did those weighing over 1,000 g. This finding was noted only when they were appropriate for their gestational age. Premature infants with adequate intrauterine growth seemed to have adequate insulin secretion before their weight reached 1,000 g and were ready for future fetal growth. When the actual growth spurt took place, these infants often did not have circulating insulin, suggesting that circulating insulin detected may not be the biologically active form. Ample growth hormone was detected in most of the samples. In contrast to insulin, growth hormone did not seem to be related to fetal growth. Infants ⩽1,000 g with perinatal asphyxia had growth hormone levels that were often 2.5 ng/mL or less. All infants with growth hormone levels 2.5 ng/mL or less died. However, no infant with chronic intrauterine stress had growth hormone levels 2.5 ng/mL or less. These data support the concept that severe insult may shut off growth hormone secretion as in hypopituitarism and chronic stress may increase growth hormone secretion.

Premature infants, particularly those weighing less than 1,500 g, often develop hypoglycemia[1–5] or hyperglycemia.[6–11] Either of these conditions may lead to brain damage or death.[11–15] Therefore, it is of utmost importance to understand the underlying pathophysiology for the prevention and treatment of these disturbances.

Numerous studies on the relationship between blood levels of glucose and glucose-regulating hormones (insulin, glucagon, and growth hormone) have demonstrated conflicting data. Some reported adequate response of insulin[10,16] and glucagon,[17] and others reported poor or absent response of insulin[18–20] and glucagon.[21–23] Absent responses of growth hormone to the blood glucose levels were reported,[24] while paradoxical rises of growth hormone in response to glucose load were observed in premature infants.[25–27]

It has been reported in the literature that there was no relationship between the blood glucose level and the concentration of glucose-regulating hormones in the premature infant during the first days of life.[18–28] Although many infants secreted insulin, glucagon, and growth hormone, the blood glucose levels did not correlate with the levels of these hormones, suggesting that some stimulus other than glucose may be responsible for controlling the secretion of these hormones. Therefore, this study was undertaken to investigate the relationship between insulin, glucagon, and growth hormone, and various clinical conditions, including birth weight, gestational age, appropriate size for gestational age, and the presence or absence of chronic intrauterine stress, perinatal asphyxia, CNS hemorrhage, or mortality.

Materials and methods

Thirty-one premature infants weighing 1,670 g or less, born consecutively between February 1977 and May 1978 at The Bronx-Lebanon Hospital Center, were studied prospectively. This study was approved by the Human Investigation Committee of The Bronx-Lebanon Hospital Center. Infants with congenital malformations were excluded from this study.

Gestational age was determined by menstrual history and by physical and neurologic examinations using the Dubowitz score.[29] Small for gestational age (SGA) infants were those who fell below the tenth percentile when plotted on the Colorado intrauterine growth chart.[30] Clinical care of the infants was not altered for this study. The infants were given intravenous 5% to 10% glucose solutions, and their glucose infusion rates were adjusted according to their blood glucose levels to maintain their levels between 25 and 125 mg/dL. Daily fluid requirements were estimated on the basis of daily weights, and our aim was to maintain their birth weights during the first week of life unless there were contraindications. No infant received intravenous amino acids or intralipids during the study period. Formula containing 20 to 24 calories/oz or breast milk was begun as soon as the infants tolerated oral feeding. Blood samples were collected by heel-stick every morning at least one hour after transfusion, exchange transfusion, or change of intravenous glucose infusion rates in the following time periods: 0–12, 13–24, 25–48, 49–72, and 73–96 hours of age. Ideally, five samples were obtained from each patient, however, an average of four samples per patient were actually collected, since some of the infants died before 96 hours of age. One sample of blood was obtained from each infant in each study period and analyzed for hormones. Because of technical problems not all samples collected were analyzed for hormone levels. The samples were kept frozen at −20°C until the time of assay. Samples for glucagon were collected in Trasylol as described by Unger.[31] All assays were done in duplicate.

Immunoreactive insulin and growth hormone were measured by radioimmunoassay using dextran-charcoal separation.[32,33] The sensitivity of the insulin assay was 3 μU/mL and the interassay coefficient of variation was 16%. The interassay coefficient of variation for growth hormone was 10%. The lowest detectable amount of growth hormone in our assay was 1.0 ng/mL, but the value of 2.5 ng/mL of growth hormone was used as the lowest detectable level in this study because most of the samples were greater than 2.5 ng/mL, and no plasma was available for repetition. A radioimmunoassay system, using a glucagon antibody validated against Unger's 30K antibody[31] was obtained from Cambridge Nuclear, Boston, for glucagon measurements. Cross-reactivity of the antibody was less than 1% against glucagon-like immunoreactivity and insulin. In our laboratory, basal (fasting) glucagon levels were 0.167 ng/mL ± SE 12.9. The value of 0.04 ng/mL was chosen as the lowest detectable value since it was the lowest value obtained that was not zero.

The Student's *t* test and chi-square test were used for the statistical analysis.

Results

The mean birth weight was 1,152 g (720–1,670). Nine infants were 1,000 g or less and 22 were between 1,001 and 1,670 g. The mean gestational age was 30.5 (26–36) weeks. Eighteen infants were less than 32 weeks and 13 were between 32 and 36 weeks. There were 18 appropriate for gestational age (AGA) and 13 SGA infants.

Complications during pregnancy are shown in Table I. Neonatal morbidity and conditions associated with neonatal mortality are shown in Tables II and III.

Blood glucose concentrations during the first 96 hours of life are shown in Fig 1. The levels of blood glucose fluctuated in individual infants and no infant developed hypoglycemia or transient neonatal diabetes mellitus with sustained hyperglycemia. However, hyperglycemia with blood glucose levels 125 mg/dL or more was not an uncommon finding (29 of 31 infants: 80.6%, and 41 of 128 samples: 32.0%).

TABLE I. Complications During Pregnancy

Complication	No. Cases
No complications	18
Alcoholic	1
Retroplacental bleeding	1
Abruptio placenta	3
Hypertensive disease of pregnancy	3
Chronic hypertension	1
Pre-eclampsia	1
Diabetes (class A) + chr. hypertension	1
Maternal fever	2
PROM (≥24 h PTD) (with mat. fever in 1)	5

PROM: Prolonged rupture of the membranes.
PTD: Prior to delivery.

TABLE II. Neonatal Morbidity

Condition	No. Cases
Perinatal asphyxia*	12
Respiratory distress syndrome	9
Pulmonary hemorrhage	6
Pneumonia	5
Clinical sepsis	13
Omphalitis	1
CNS hemorrhage	5
Hypocalcemia (total Ca ≤7.0 mg/dL)	10
Anemia (Hct ≤40% in 1st. week)	5

* Apgar score ≤3 at 1 minute.

TABLE III. Neonatal Mortality and Associated Conditions

Condition	No. Cases
Total deaths	11
Perinatal asphyxia*	7
Respiratory distress syndrome	5
Pneumonia	3
Pulmonary hemorrhage	3
Clinical sepsis	2
CNS hemorrhage	5

* Apgar score ≤3 at 1 minute.

Plasma insulin, glucagon, and growth hormone were measured during the intervals of collection in the first 96 hours of life. Although the glucose-regulating hormones were variably detected in the blood, the levels of insulin, glucagon, and growth hormone did not correlate to their respective blood glucose levels (Figs 2,3,4). Hormone levels in blood were then correlated with the following: birth weight 1,000 g or less and 1,001–1,670 g; gestational age less than 32 weeks or 32 weeks or more; AGA or SGA; and presence or absence of chronic intrauterine stress (hypertensive disease of pregnancy and retroplacental bleeding), perinatal asphyxia, or CNS hemorrhage; and mortality.

Plasma insulin was undetectable in 85.2% of the samples with levels less than 3 μU/mL (Fig 5). Plasma insulin levels and various clinical conditions are compared in Table IV. The only significant re-

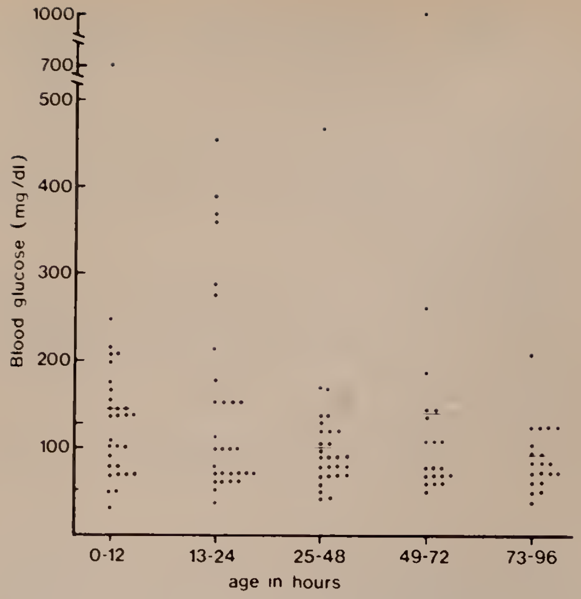

FIGURE 1. Blood glucose levels during first 96 hours of life in 31 LBW infants. Mean glucose levels during intervals of collection were 145, 157, 109, 145, 91 mg/dL, respectively.

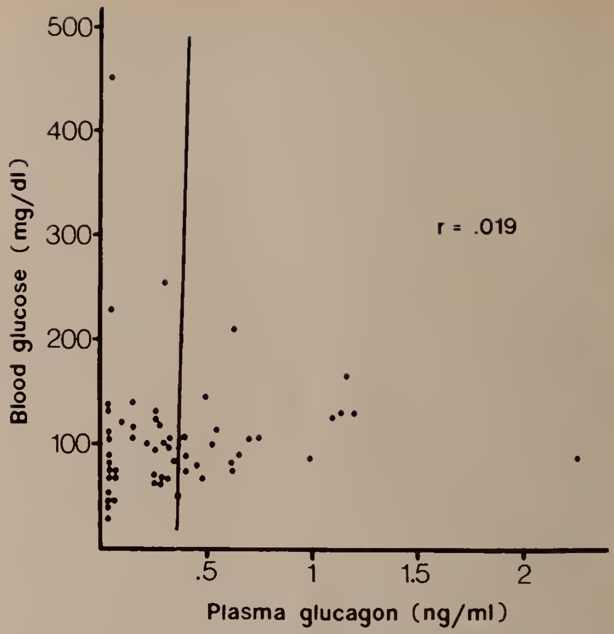

FIGURE 2. Relationship between levels of blood glucose and insulin.

lationship was observed in the birth weight groups. Infants with birth weights 1,000 g or less more often had detectable insulin levels when compared with infants weighing over 1,000 g. Since there was no relationship between insulin levels and the two gestational age groups and between insulin levels and the AGA and SGA groups, we compared the mean birth weights and gestational ages in AGA and SGA groups. Their mean birth weights (1,166 g in the AGA group, 1,208 g in the SGA group) were not significantly different in the two groups while the mean gestational age (29 weeks) in the AGA group was significantly lower than that (33 weeks) in the SGA group ($P < .001$). Since insulin levels were related to their birth weight, not to their gestational age, and their mean birth weights were not significantly different in the AGA and SGA groups, the incidence of detectable plasma insulin in the two groups was similar, as expected.

We then analyzed the relationship between the incidence of detectable insulin levels and birth weight in each AGA and SGA group (Table V). Infants weighing 1,000 g or less more often had measurable

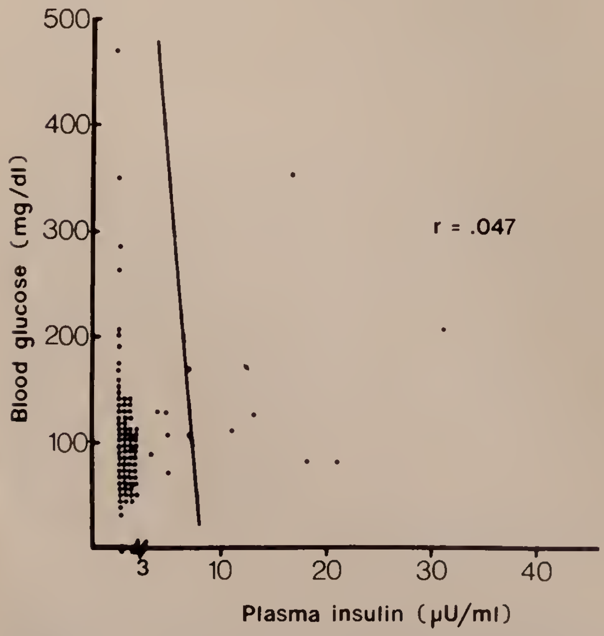

FIGURE 3. Relationship between levels of blood glucose and glucagon.

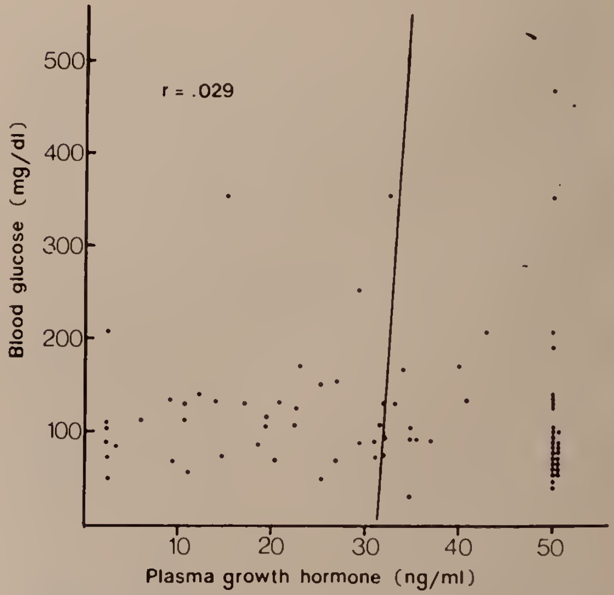

FIGURE 4. Relationship between levels of blood glucose and growth hormone.

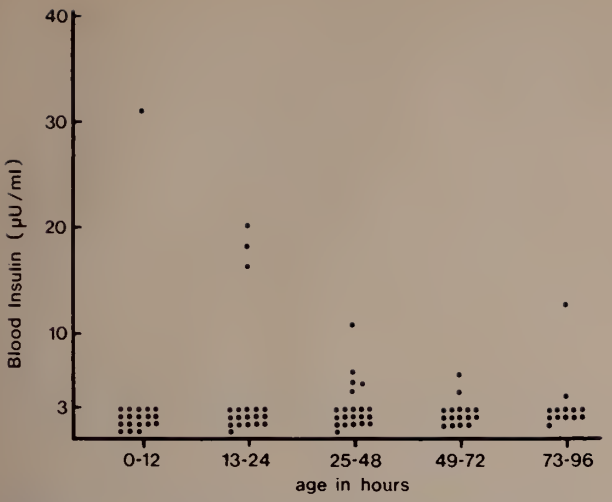

FIGURE 5. Levels of blood insulin during first 96 hours of life in 31 LBW infants.

insulin levels only when they were AGA ($P < .001$). When the infant was over 1,000 g and AGA, no infant had detectable insulin. When they were SGA, there was no significant difference in the incidence of detectable insulin levels in the two birth weight groups.

Plasma glucagon was detected in most of the samples (75.4%), in contrast to insulin. The mean plasma glucagon levels in each of the time periods were not significantly different (Fig 6).

The incidence of detectable glucagon values, 0.04 to 2.2 ng/mL, was not significantly different in the various clinical groups (Table IV under glucagon). However, the incidence (94.4%) of detectable glucagon in the infants weighing 1,000 g or less was higher than the incidence of 66.7% in the infants weighing between 1,001 and 1,670 although it was not statistically significant ($P = .05–.1$). As with insulin, there was a tendency for the AGA infants weighing 1,000 g or less to have detectable glucagon more often than infants weighing between 1,001 and 1,670 g. When they were SGA, there was no difference between detectable glucagon levels and birth weight (Table V).

Ample growth hormone was detected during the first 96 hours of life (Fig 7). The relationship between growth hormone and various clinical conditions is shown in Table IV. Infants with birth weights of 1,000 g or less, perinatal asphyxia, or death more often had undetectable growth hormone: 2.5 ng/mL or less ($P < .02$, $P < .025$, $P < .001$, respectively). All infants with a growth hormone value of 2.5 ng/mL or less died. However, no infant with chronic intrauterine stress had a growth hormone value of 2.5 ng/mL or less.

Comment

In this study, insulin was often undetectable, as reported by others.[22,23] The incidence of detectable insulin and glucagon levels was not different in the various clinical conditions: gestational age; AGA and SGA; chronic intrauterine stress; perinatal asphyxia; CNS hemorrhage; and mortality. However, it was significantly different in the birth weight groups. There have been many reports supporting the concept that insulin may be the major anabolic "growth hormone" of the fetus.[34–37] Cheek and Graystone[34] have demonstrated that insulin promotes an increase in cell size by stimulating protein synthesis. Several studies revealed a positive correlation between birth weight and serum insulin levels in infants of diabetic mothers[35,36] and in infants with intrauterine growth retardation.[37] Recent studies demonstrated increased absolute numbers of insulin receptors and increased receptor affinity for insulin in fetal cells.[38] Also, hyperinsulinemia did not down-regulate the

TABLE IV. Insulin and Glucagon in Various Clinical Conditions

	Incidences in Percent*					
Clinical Conditions	Insulin 3–30.7 μU/mL	*P*	Glucagon 0.04–2.2 ng/mL	*P*	Growth Hormone ≤2.5 ng/mL	*P*
BW, g ≤1,000	38.5 (10/26)	<.001	94.4 (17/18)	NS	21.7 (5/23)	<.02
1,001–1,670	4.8 (3/62)		66.7 (26/39)	.05–.1	1.9 (1/53)	
GA, wk <32	18.9 (10/53)	NS	75.8 (25/33)	NS	11.6 (5/43)	NS
≥32	8.6 (3/35)		75.0 (18/24)		3.0 (1/33)	
AGA	18.5 (10/54)	NS	71.8 (28/39)	NS	8.7 (4/46)	NS
SGA	8.8 (3/34)		83.3 (15/18)		6.7 (2/30)	
Chronic in-utero stress	0.0 (0/12)	NS	...		0.0 (0/7)	NS
No chronic in-utero stress	17.1 (13/76)		...		8.7 (6/69)	
Perinatal asphyxia	17.2 (5/29)	NS	70.6 (12/17)	NS	20.0 (5/25)	<.025
No perinatal asphyxia	13.6 (8/59)		77.5 (31/40)		2.0 (1/51)	
CNS hemorrhage	0.0 (0/4)	NS	...		14.3 (1/7)	NS
No CNS hemorrhage	15.5 (13/84)		...		7.2 (5/69)	
Alive	12.1 (8/66)	NS	75.0 (33/44)	NS	0.0 (0/56)	<.001
Died	22.7 (5/22)		76.9 (10/13)		28.6 (6/20)	

* Values in parentheses indicate number of samples.
BW: birth weight; GA: gestational age; AGA: appropriate gestational age; SGA: small gestational age; CNS: central nervous system.

TABLE V. Insulin and Glucagon *v* BW in AGA and SGA Infants

		Incidence in Percent*			
		Insulin, μU/mL		Glucagon, ng/mL	
GA	BW, g	3–30.7	*P*	0.04–2.2	*P*
AGA	≤1,000	45.5 (10/22)	<.001	92.9 (13/14)	NS
	1,001–1,670	0.0 (0/32)		60.0 (15/25)	(.05–.1)
SGA	≤1,000	0.0 (0/4)	NS	100.0 (4/4)	NS
	1,001–1,670	10.0 (3/30)		78.6 (11/14)	

* Values in parentheses indicate number of samples.
BW: birth weight; AGA: appropriate for gestational age; SGA: small for gestational age; GA: gestational age.

number of insulin receptors of fetal cells in infants of diabetic mothers.[39] The presence of higher levels of plasma insulin in our AGA infants who have, by gestational age and weight criteria, not reached their peak intrauterine growth rates (30 weeks gestational age or 1,300 g) is a paradox. These data raised a question as to why the incidence of detectable insulin is lower when the actual growth spurt takes place. Since insulin action is initiated by its binding to specific reporters on target cells,[39] bound insulin, not the circulating insulin, may be related to growth. These circulating insulin levels may indicate only readiness for the time when the number of insulin receptors of fetal cells increases. When the actual growth spurt takes place, the circulating insulin levels fall and perhaps bound insulin may increase to promote anabolism. Further studies are required to clarify this speculation.

Growth hormone secretion in this study was related to mortality and morbidity. All infants with growth hormone 2.5 ng/mL or less at any time during the study period died. Infants with birth weights of 1,000 g or less and perinatal asphyxia often had growth hormone levels that were 2.5 ng/mL or less. It is generally accepted that newborn infants have much higher levels of growth hormone.[40] In addition, paradoxic rises of growth hormone levels in response to glucose load is seen in premature infants.[25-27] Although one value of growth hormone 2.5 ng/mL or less does not establish the diagnosis of hypopituitarism, growth hormone levels of 2.5 ng/mL or less strongly suggests these infants have organic or functional hypopituitarism. At autopsy, no infant had organic hypopituitarism. Infants with hypopituitarism have higher mortality and morbidity rates[41]; however, we could not determine whether the hypopituitarism with low growth hormone values of 2.5 ng/mL or less was the cause or the result of the mortality or morbidity in our study. No infant with chronic intrauterine stress had growth hormone levels of 2.5 ng/mL or less, and chronic intrauterine stress in these infants was not severe enough to decrease growth hormone secretion but was stressful enough to increase growth hormone secretion. Our data merely support the concept that severe insult

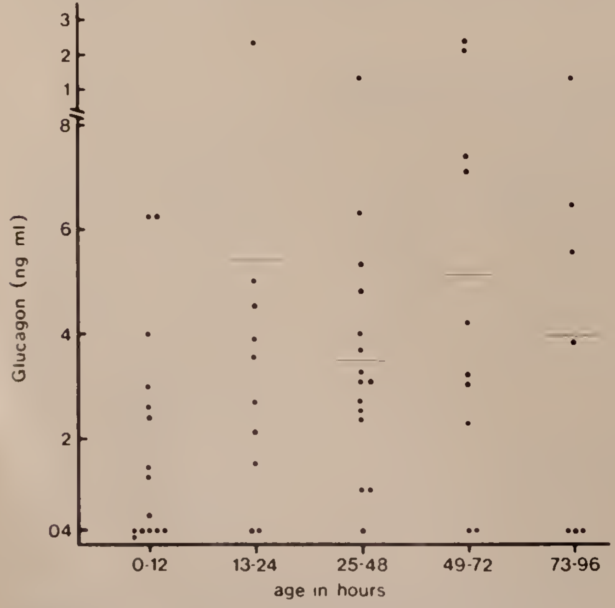

FIGURE 6. Levels of plasma glucagon during first 96 hours of life in 31 LBW infants.

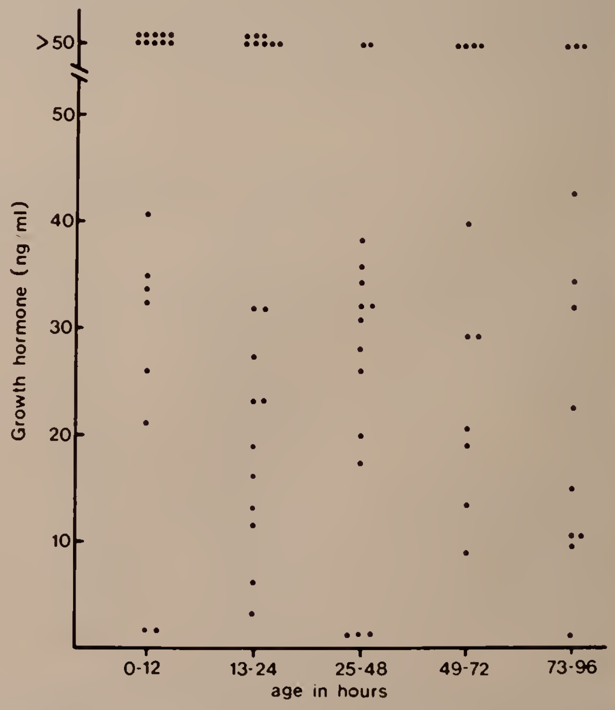

FIGURE 7. Levels of blood growth hormone during first 96 hours of life in 31 LBW infants.

may shut off growth hormone secretion as in hypopituitarism and chronic stress may increase growth hormone secretion.

In summary, this study revealed that fetal growth seems to be related to insulin levels in the AGA infant. Premature AGA infants seem to have adequate insulin secretion before their weights reach 1,000 g and are ready for future fetal growth. When the actual growth spurt takes place, AGA infants often did not have circulating insulin. Therefore, the circulating insulin that was measured may not be a biologically active form and may be meaningless when correlated with fetal growth. This may also be true when circulating insulin levels are analyzed in relation to blood glucose levels, as we demonstrated in our previous study.[28] Glucagon secretion was not related to any clinical condition. Growth hormone secretion does not seem to be related to fetal growth but is related to neonatal morbidity and mortality.

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Acknowledgments. We wish to thank Chester Edelmann, M.D., Harold Nitowski, M.D., and Burton Cohen, M.D., for their helpful advice and criticism. We are grateful to Ms. Grace Amoye and Ms. Patricia Wade for their technical assistance and to Ms. Dorothy Zapakin for her secretarial help.

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1982

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sleep la•ten•cy. The period of time measured from "lights out," or bedtime, to the commencement or onset of sleep.

wake time af•ter sleep on•set. Intervals of time spent awake between onset of sleep and the end of the sleep period. The polysomnograph registers the length and frequency of the intervals.

to•tal sleep time. The amount of time actually spent in sleeping. This is estimated by subtracting wake times from the period encompassed by the onset and the termination of sleep.[1]

REM/NREM. 1. REM, or rapid eye movement, sleep is "active"—characterized by increased metabolic rates, elevated temperature and arousal-type EEG patterns. 2. NREM, or non-rapid eye movement, sleep represents "quiet" sleep stages. There are four distinct stages of NREM sleep.[2]

re•bound in•som•nia. A statistically significant worsening of sleep compared to baseline on the nights immediately following discontinuation of sleep medication.[3]

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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

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(*continued from page 170*)

AIDS victims found at risk for rare bacterial infection

Eight of nine patients who died with acquired immunodeficiency syndrome (AIDS) at a University of California hospital were found to have disseminated infections with a bacterial strain that rarely causes disease in healthy people.

Writing in the *Journal of the American Medical Association*, Phillip Zakowski, M.D., and colleagues from the UCLA Center for the Health Sciences, Los Angeles, report the cases of five of those AIDS patients, homosexual males, who died with disseminated infections with *Mycobacterium avium-intracellulare*, a strain that is common in the environment but only seldom causes disease in humans. When it does strike, the result is most often localized lung disease.

AIDS has been reported recently in persons who are homosexuals and/or intravenous drug abusers. It is characterized by alterations in the patient's immune system that put him at risk for a variety of infections and for a tumor known as Kaposi's sarcoma.

Because Zakowski's patients suffered from a number of infections, it is unclear what role the mycobacterial infection played in their altered immunity and subsequent deaths. Although Zakowski and his group consider their findings preliminary, they suggest that doctors seek evidence of mycobacterial infection in homosexuals with signs of AIDS.

In an accompanying editorial, however, Henry Masur, M.D., of the National Institutes of Health, Bethesda, Md., writes that prompt diagnosis of mycobacterial infection has rarely helped AIDS patients because the organisms are almost always resistant to most antimycobacterial drugs. Most patients have died, despite treatment with multiple-drug regimens. Since AIDS patients are susceptible to such a wide range of devastating infections and cancers, it is advised that real progress in treating this condition will be made by discovering how AIDS is transmitted and how it alters the body's immune defenses.

Significant reduction in maternal mortality

Over the past half century, there has been a significant reduction in deaths per 100,000 live births in New York City, from 486 in 1934 to 31 deaths per 100,000 today, according to official figures presented by Dr. Jean Pakter, consultant to the Commissioner of Health, New York City Department of Health at a conference on Maternal Mortality at The New York Academy of Medicine. In 1934 it was 486; in 1943, it was 217; in the 60s it was 67 and at present it is 31 deaths per 100,000.

(*continued on page 197*)

The Quality of Life in Patients with Cancer

*A survey at one treatment center**

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Cancer patients sometimes face a variety of social and vocational problems as a result of their disease. Little quantitative data exist on the quality of life among these patients. Self-reported assessments of impairment, employability and nursing care needs have been collected for 1,902 cancer patients seen at Roswell Park Memorial Institute over the last decade. Variation in levels reported have been examined according to sex, age, diagnosis, stage at diagnosis, length of survival, types of treatment, and current disease status. Age, stage of diagnosis, diagnosis and current disease status were found to be associated with self-reported quality of life. Treatment by surgery only was associated with the lowest levels of impairment and nursing care needs and highest employability of any treatment type. No significant variation in quality of life was observed by length of survival. Females were less likely to report impairment than males, but there were no other differences observed with regard to sex. Levels of impairment observed were compared to similar information from a survey of the US population. Former cancer patients report slightly greater impairment than the general population. This type of data may be used to identify patients in need of rehabilitative services and to determine what type of services are most appropriate. It may also provide insight into the impact of modern treatment practices on quality of life for these patients.

Many hospitals maintain tumor registries that conduct cancer patient follow-up on an ongoing basis. Usually, this procedure is limited to the collection of data on patients' survival experience and whether the disease continues to be present or has recurred. While this information is very valuable to cancer research, the procedure is seldom used to acquire other information about cancer patients' status after treatment. The quality of cancer patient survival can be as important as the length of the survival, but only a few studies have examined the quality of survival of cancer patients and they typically concerned a smaller number of patients with a restricted range of diagnoses. At Roswell Park Memorial Institute in Buffalo, New York, all patients are routinely followed to assess their ability to carry out their usual activities, their employability, and their need for nursing care. This report describes the results of these assessments.

Another stimulus for our research is the expectation by the American College of Surgeons Commission on Cancer that approved hospital cancer programs follow patients to determine their quality of survival. This is a relatively recent policy and our report is, in part, to demonstrate the feasibility of obtaining such follow-up information from the hospital tumor registry.

Materials and Methods

The Tumor Registry of Roswell Park Memorial Institute serves as a repository for data pertaining to diagnosis, treatment, follow-up, and end results of all cancer patients seen at the Institute since 1971. Follow-up is conducted on a yearly basis for all patients not known to be deceased. Between April 1, 1981 and November 18, 1981 questionnaires were mailed to 3,104 patients who were due for follow-up.

The form used contained the following instruction to the patient:

> As part of routine follow-up of Roswell Park patients, we wish to evaluate your ability to carry on the functions of daily living and work. We would appreciate your selecting the *one* statement in each group which most nearly describes your condition at the present time.

The choices offered regarding ability to carry out activities included the following statements:

I am fully able to perform my usual activities.
I have limited ability to perform my usual activities.
I am incapable of performing my usual activities.

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* Research supported in part by National Cancer Institute Grants CA-16411, CA-16056, and CA-21190 from the Public Health Service.

I am incapable of performing my usual activities but not due to any of the conditions for which I was treated at RPMI.

Employability was assessed by the patient's selection of one of the following statements:

I am fully able to be employed.
I have limited ability to be employed.
I am incapable of being employed.
I am incapable of being employed but not due to any of the conditions for which I was treated at RPMI.
This question is not applicable because I am a student, homemaker, retired, etc.

Nursing care needs were assessed by the selection of the one statement from below that best described the patient's needs:

I do not need *any* nursing care.
I need *some* nursing care.
I need *full-time* nursing care.

Demographic characteristics, diagnosis, stage at diagnosis, time elapsed since diagnosis, types of treatments received, and current disease status of the patient were determined from tumor-registry records. Age-specific rates of capacity to carry out usual activities, to be employed, and to require no nursing care were calculated for patients grouped according to these patient, disease, and treatment characteristics. Statistical significance was assessed using two-tailed tests of differences of proportions and chi square. Two hundred forty-six patients were diagnosed as having nonmelanotic skin cancer. These persons were excluded from the analyses. Because our interests are cancer related, responses that impairments or employment problems were not cancer related and all other indications of inapplicability were treated as though they were missing data. Thus column totals in some tables will not equal total number of respondents.

Results

Response. Follow-up information was completed for 1,902 of the 3,104 patients under review. One hundred eighty-one forms were returned with notation that the patient was deceased, 167 were returned as undeliverable, and 854 were not returned or were returned incomplete with no account of patient status. The characteristics of the 1,902 patients to be examined in detail, herein, were compared with the 1,202 nonrespondents with respect to age, sex, diagnosis, and stage at diagnosis. No significant differences were observed between the two groups for any of these variables ($p < .05$). Table I provides a breakdown of response rate by cancer diagnosis. With the exception of lung cancer, there was little variation in response rate by diagnosis. The lower response rate for lung cancer patients is attributable to an increase in the percentage of patients reported deceased at follow-up. The percentage of lung cancer patients who failed to reply or for whom it was impossible to deliver the follow-up questionnaire was not significantly different from the percentage of patients with other cancer diagnoses in this category.

Sex, age, and race. Table II shows the distribution of individuals' assessments of their impairment, employability, and nursing care needs by sex. Males and females were virtually identical in their reported needs for nursing care. Only 10.4% of patients overall reported any need for nursing care and 1.5% required full-time nursing care. Overall, 61.9% of patients regarded themselves as fully able to be employed and no significant association between sex and level of employability was found. Two thirds of patients reported themselves fully able to perform their usual activities with females slightly less likely to report impairment than males ($X^2 = 8.98$, $p < .05$).

Most of the respondents were white (97.8%). The majority (59.4%) were females. Age at diagnosis ranged from 1 month to 95 years, and the median age was 55 years. Table III reports the distribution of persons reporting full capability by age. Each of the dimensions of quality of survival is shown to be as-

TABLE I. Response by Cancer Diagnosis

Diagnosis	Number of Respondents (%)	Number Deceased (%)	Number No Reply Or Undeliverable (%)	Total (%)
Head and neck	125 (65.1)	12 (6.3)	55 (28.6)	192 (100)
Colorectal	96 (59.3)	13 (8.0)	53 (32.7)	162 (100)
Lung	46 (35.9)	31 (24.2)	51 (39.8)	128 (100)
Other respiratory	61 (62.2)	6 (6.1)	31 (31.7)	98 (100)
Leukemia and lymphoma	274 (65.4)	17 (4.1)	128 (30.5)	419 (100)
Malignant melanoma	70 (70.7)	4 (4.0)	25 (25.3)	99 (100)
Other skin cancer	140 (56.9)	9 (3.7)	97 (39.4)	246 (100)
Soft tissue sarcoma	44 (66.7)	1 (1.5)	21 (31.8)	66 (100)
Breast cancer	216 (60.8)	19 (5.4)	120 (33.8)	355 (100)
Female reproductive	364 (62.2)	21 (3.6)	200 (34.2)	585 (100)
Urinary tract and male reproductive	226 (62.8)	22 (6.1)	112 (31.1)	360 (100)
All other types	240 (60.9)	26 (6.6)	128 (32.5)	394 (100)
Total	1,902 (61.3)	181 (5.8)	1,021 (32.9)	3,104 (100)

TABLE II. Activity, Employability, and Nursing Care Needs by Sex

Response	Male No.	Male (%)	Female No.	Female (%)	Total No.	Total (%)
Activity level						
Fully capable	413	63.3	670	68.5	1083	66.4
Limited capability	167	25.6	239	24.4	406	24.9
Incapable	72	11.1	69	7.1	141	8.7
Total	652	100.0	978	100.0	1630	100.0
Employability						
Fully employable	262	62.1	330	61.8	592	61.9
Limited employability	68	16.1	72	13.5	140	14.7
Unemployable	92	21.8	132	24.7	224	23.4
Total	422	100.0	534	100.0	956	100.0
Nursing care needs						
No need	620	89.6	912	89.7	1532	89.6
Some care needed	65	9.4	86	8.5	151	8.8
Need full-time care	7	1.0	19	1.9	26	1.5
Total	692	100.0	1017	100.0	1709	100.0

No. = number responding
% = percent of total applicable

TABLE III. Number and Percent of Respondents Indicating Full Capability, Full Employability, and No Nursing Care Needs by Age

Response	<9 No. (%)	10–19 No. (%)	20–29 No. (%)	30–39 No. (%)	40–49 No. (%)	50–59 No. (%)	60–69 No. (%)	70–79 No. (%)	80–89 No. (%)	Total No. (%)	No. (%)
Fully capable	55 91.7	65 82.3	122 89.1	130 73.4	163 75.6	219 58.1	236 59.0	82 55.0	11 64.7	0 0	1083 66.4
Fully employable	8 80.0	49 86.0	114 89.0	107 71.8	126 67.7	123 50.2	57 41.0	8 20.0	1 25.0	0 0	592 61.9
No nursing care needs	56 93.3	76 97.4	133 97.8	158 90.8	233 92.1	356 90.8	381 88.2	122 77.2	18 69.2	0 0	1533 90.8

TABLE IV. Number and Percent of Respondents Indicating Full Capability, Full Employability and No Nursing Care Needs by Cancer Diagnosis and Age

Response and Age in Years	Head and Neck No.	Head and Neck (%)	Colorectal No.	Colorectal (%)	Respiratory No.	Respiratory (%)	Leukemias and Lymphomas No.	Leukemias and Lymphomas (%)	Malignant Melanomas Soft Tissue Sarcomas No.	Malignant Melanomas Soft Tissue Sarcomas (%)	Female Reproductive No.	Female Reproductive (%)	Urinary Tract and Male Reproductive No.	Urinary Tract and Male Reproductive (%)	All Other Types* No.	All Other Types* (%)	Total No.	Total (%)
Fully capable																		
<29	11	91.7	2	100.0	1	100.0	104	89.7	22	91.7	31	88.6	34	91.9	37	75.5	243	84.0
30–59	34	69.4	19	57.6	30	51.7	57	62.6	40	72.7	224	70.8	39	57.3	69	59.0	512	62.0
>59	29	55.7	34	66.7	10	30.3	28	48.3	21	75.0	115	62.2	61	60.4	31	53.4	325	55.0
Fully employable																		
<29	9	81.8	1	100.0	0	0	66	91.7	18	85.7	28	93.3	26	92.8	22	71.0	179	87.0
30–59	10	52.6	22	59.5	10	45.5	20	45.5	34	66.7	24	75.0	140	65.7	35	64.8	380	62.0
>59	6	37.6	3	27.3	3	20.0	5	21.7	9	55.0	17	32.7	23	56.1	4	25.0	71	37.0
No nursing care needs																		
<29	13	100.0	2	100.0	1	100.0	109	94.8	22	100.0	34	100.0	37	97.4	47	95.9	275	96.0
30–59	49	94.2	30	83.3	55	91.7	88	94.6	55	94.8	297	90.0	60	88.2	113	92.6	781	91.0
>59	44	83.0	46	83.6	33	82.5	55	90.2	28	87.5	160	81.2	96	86.5	59	86.8	542	84.0

* Other sites included were thyroid, esophagus, stomach and small intestine, liver, gallbladder, pancreas, bones, joints, retroperitoneum, and endocrine glands.

TABLE V. Number and Percent of Respondents Indicating Full Capability, Full Employability and No Nursing Care Needs by Stage at Diagnosis and Age

Response and Age in Years	In Situ		Benign		Local		Regional		Distant		Unknown		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Fully capable														
<29	12	100.0	4	100.0	80	90.9	60	85.7	75	86.2	11	73.3	242	89.1
30–59	29	93.5	9	69.2	245	73.1	160	59.5	52	52.0	17	41.4	512	64.9
>59	8	57.1	7	100.0	167	66.8	96	50.8	36	45.6	15	55.5	329	58.1
Fully employable														
<29	10	100.0	4	100.0	67	91.8	44	86.3	38	86.4	7	58.3	170	87.6
30–59	19	90.5	7	58.3	169	70.7	104	50.5	43	53.1	14	37.8	356	61.4
>59	2	40.0	0	0	41	50.0	15	26.3	6	19.4	2	25.0	66	36.1
No nursing care needs														
<29	11	100.0	4	100.0	87	100.0	68	97.1	81	94.2	14	87.5	265	96.7
30–59	32	97.0	12	92.3	326	93.2	254	91.0	86	85.1	37	86.0	747	91.2
>59	10	90.9	9	90.9	245	87.2	164	81.2	69	84.1	24	77.4	521	84.4

sociated with advancing age. Little decline is manifested across the first three decades of age at diagnosis for either capability or employability, but lesser rates are evident thereafter. A need for any nursing care is reported by less than 10% of patients through age 59 and then increases only to 30.8% by age 89. Because several variables differ by patient age, subsequent analyses report age-specific rates of capability to minimize the confounding effects of age at diagnosis on other relationships.

Diagnosis and stage at diagnosis. Patients of differing age or sex are likely to differ also in their diagnoses. Table IV reports the distributions of responses by age and category of diagnosis. The general pattern of quality of life declining with age is not found for certain diagnoses. For example, the older colorectal cancer, urinary tract cancer, and melanoma patients self-report less impairment than those in the middle-aged category, although the differences are slight and not statistically significant. Overall, the melanoma–soft tissue sarcoma category was associated with lowest impairment, greatest employability, and least need for nursing care. Older respiratory cancer patients tended to indicate the greatest degree of impairment, least employability, and greatest need for nursing care. Older leukemia-lymphoma patients were similarly afflicted.

Within each age category, repondents with more advanced disease at diagnosis were more likely to report impairment (Table V). Benign tumors in the middle-aged category were associated with greater impairment than either those patients with in situ or localized malignant lesions, but these differences were not statistically significant. Stage was of little value in differentiating quality of life among younger patients, and the association of stage to impairment was most evident among the large number of patients 30 to 59 years of age.

The number of cases available was not sufficient to allow a comparison of capability rates by individual cancer type and stage at diagnosis for all diagnoses. However, Table VI reports the number and percent of patients indicating full capability by stage at diagnosis for three of the common cancers diagnosed. Respondents with more advanced disease at diagnosis were again found more likely to report impairment than those with localized disease.

A significantly greater proportion of breast cancer patients with localized disease reported full capability than did colorectal cancer patients with the same stage of disease at diagnosis ($p < .05$). Among those with regional stage disease at diagnosis, lung cancer patients reported the highest degree of impairment. The difference in full capability rates between lung cancer respondents and those falling into other diagnostic categories was statistically significant at $p < .02$.

Current disease status

The Roswell Park Tumor Registry routinely classifies patients with respect to their most recently

TABLE VI. Number and Percent of Respondents Indicating Full Capability by Cancer Diagnosis and Stage at Diagnosis for Selected Sites

Diagnosis	In Situ		Benign		Local		Regional		Distant		Unknown		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Colorectal	2	100	7	100	7	50.0	33	63.5	4	57.1	2	50.0	55	64.0
Female breast	0	0	0	0	70	78.7	55	55.0	6	40.0	4	100.0	135	64.9
Lung	0	0	0	0	8	61.5	3	18.7	2	33.3	0	0	13	35.1

TABLE VII. Number and Percent of Respondents Indicating Full Capability, Full Employability and No Nursing Care Needs by Current Disease Status

Response and Age in Years	Alive, No. Evidence of Cancer		Alive, Cancer Reported		Alive, Cancer Status Unknown		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Fully capable								
<29	188	89.6	6	85.7	48	81.4	242	87.7
30–59	379	68.3	21	31.3	112	67.1	512	64.9
>59	235	60.6	16	34.8	78	59.5	329	58.1
Fully employable								
<29	132	91.0	3	75.0	35	77.8	170	87.6
30–59	262	64.4	14	34.1	80	60.6	356	61.4
>59	46	41.1	5	23.8	15	21.4	66	36.1
No nursing care needs								
<29	205	98.6	7	100.0	53	89.8	265	96.7
30–59	540	94.9	48	71.6	159	86.9	747	91.2
>59	376	87.2	30	71.4	114	80.9	520	84.4

known disease status. Patients are identified as alive, no evidence of cancer; alive, cancer present; and alive, cancer status unknown. This is of value in predicting the quality of life measures assessed in our survey. As shown in Table VII, most of the younger patients were reported to be alive, without cancer present. The small numbers in the other categories tended to report little impairment. In contrast, middle-aged and older patients varied markedly in their reported impairment according to whether cancer was known to be present. A similar pattern of response was observed for questions concerning ability to perform usual activity, self-assessed employability, and need for nursing care. Significant differences in rates of full capability, full employability, and need for nursing care were evident between persons 30 to 59 years of age with no cancer compared to those with disease known to be present ($p < .005$). For those 60 years old and over, significant differences were observed in rates of full capability only ($p < .002$).

Treatment

Table VIII reports the distribution of rates of full capability, full employability, and need for nursing care by type of cancer-directed therapy received by the patient. Few younger patients reported any need for nursing care, irrespective of treatment modality. However, this group did report lower levels of capability and employability when their therapies involved multiple modalities. The rates of full capability and full employability for young patients treated by combinations of treatments were significantly lower than for patients treated by surgery only ($p < .05$).

Among the middle-aged and older patients, treatment by surgery only was associated with the least impairment on terms of ability to perform usual activities. Less difference was evident between other treatments for these age groups and this aspect of quality of life. Among middle-aged patients, self-reported employability was greatest for those treated

TABLE VIII. Number and Percent of Respondents Indicating Full Capability, Full Employability and No Nursing Care Needs by Treatment and Age

Response and Age in Years	Surgery Only		Radiation Only		Chemotherapy Only		Combination of Treatment Modalities		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Fully capable										
<29	50	98.0	21	91.3	30	93.8	140	82.8	241	87.6
30–59	199	76.2	40	62.5	17	62.5	254	59.8	510	65.1
>59	134	69.1	30	56.6	10	40.0	146	51.8	320	57.8
Fully employable										
<29	46	95.8	16	94.1	8	100.0	100	82.6	170	87.6
30–59	129	68.6	30	55.6	13	50.0	181	58.8	353	61.3
>59	21	43.8	8	47.1	2	18.2	34	18.2	65	35.7
No nursing care needs										
<29	50	100.0	22	95.7	30	93.8	162	96.4	264	96.7
30–59	258	94.9	60	89.6	33	91.7	391	89.1	742	91.2
>59	196	90.7	48	75.0	22	88.0	244	81.3	510	84.3

by surgery only. Among older patients, radiation only yielded highest rates of employability, however, the number involved was too small to attach statistical significance. Persons over age 59 treated by surgery only reported the least need for nursing care.

Survival

Not presented are our analyses of quality of life by length of survival. All respondents were, by virtue of our method, cancer survivors, but the length of survival varied from less than one year to ten years. The median survival for respondents was 43 months. No significant variation in quality of life as measured was observed even when the possible interacting role of patient age was controlled.

Comment

Over the past decade, new treatments have led to improved cure rates for some types of cancer and increased length of survival for patients with many other types of cancer.[1] One result of this is an increasing number of persons who must learn to live with the disruption and disability caused by their disease.[2] In some instances, treatment itself causes disability. Two studies suggest that long-term survivors of childhood cancer and breast cancer have a quality of life similar to persons of the same age who have never had cancer.[3,4] Other studies indicate that cancer patients often face a multitude of social and vocational problems.[2,4,5] Few quantitative data exist on the quality of life among those with cancer. Such data may be used to identify patients in need of rehabilitative services and to determine what type of services are most appropriate.

In interpreting the results of this study, certain limiting factors should be kept in mind. The questionnaires completed by study participants do not provide completely objective measurements of an individual cancer patient's quality of life. While individual patients may be the best judge of their own quality of life, their reports may vary from those of others, such as their spouse or physician. In a similar vein, we inquired as to employability, but the actual employment status of the patient might provide additional information as to the vocational adjustment of the cancer survivors we surveyed.

No differences in the background characteristics of respondents and nonrespondents were discerned, but it is possible that nonrespondents had different quality of life than responders. By continued follow-up of patients in our registry, we expect to obtain additional information on persons for whom no information is now available, and we will then be better able to assess this question. This study was limited to those known to be alive at follow-up. Therefore, the results reported may not be representative of the quality of life experienced by short-term cancer survivors or patients dying of their disease.

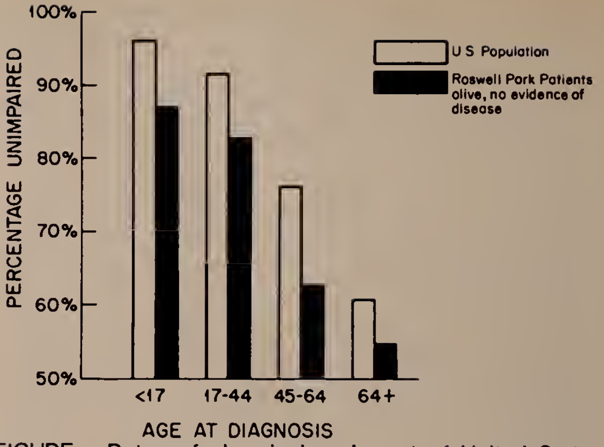

FIGURE. Rates of chronic impairment of United States population and Roswell Park Memorial Institute patients, alive, no evidence of disease.

These and other limitations not withstanding, our results from routine follow-up of a large number of cancer patients do provide some potentially valuable information. Among our principal findings were the observations that only a small proportion of surviving cancer patients report a need for nursing care and that the majority report themselves to be fully capable of performing their usual daily activities and, indeed, to be fully employable. Males and females appear to enjoy equal quality of life as measured in this study. Younger cancer patients report the highest degree of adjustment to their condition and the oldest patients are, by their own account, most affected. However, the demands of usual daily activity and of employment may be less for younger patients, making impairment less problematic for them.

Although our questionnaire has not been administered to a population with a cancer-free history, data from the 1981 National Health Interview Survey of 217,923 persons does provide a point of comparison.[6] Levels of self-reported chronic impairment in the general population are shown in Fig 1.[6,7] As was the case with our patients, reported full capability decreased with age. Comparison of former patients with no evidence of cancer to the general population suggests that at every age cancer patients have slightly more impairment, but the two surveys were performed using different procedures. A more certain conclusion that recovered cancer patients experience greater impairment than persons of comparable ages in the general population could be obtained if the Roswell Park survey were mailed to a representative sample of the population.

In certain respects, the factors that most influence quality of survival are the same as those that are believed to most influence the length of survival. Early diagnosis appears to be associated with more favorable levels of impairment reported. Cure, as opposed to continuing presence or recurrence of disease, markedly lowers the rate of impairment.

Similarly, the type of cancer diagnosed appears to affect quality of life, with diagnoses bearing poor prognosis, such as respiratory neoplasm or adult leukemias and lymphomas, having higher reported levels of impairment. In general, level of impairment increased as stage at diagnosis became more advanced for each type of cancer studied. However, cancer patients with the same stage at diagnosis but a different cancer type did not always report the same degree of impairment.

In 1976, Orces et al.[8] reported that breast cancer patients had a lower probability of death or disability during the four years following initial treatment than did colorectal cancer patients, in spite of the fact that a higher proportion of breast cancer patients had an advanced stage of disease. In our study, breast cancer patients reported significantly less impairment than did colorectal cancer patients for localized disease. Among respondents with a more advanced stage of disease, breast cancer patients reported higher levels of impairment than did colorectal cancer patients, but this difference was not statistically significant.

As one might expect, treatment was also correlated with quality of life. Although surgery is sometimes debilitating, this modality was found to least affect quality of life. However, patients treated by surgery only may differ from those receiving a combination of treatments with respect to diagnosis and stage of disease. Surprisingly, radiation and chemotherapy when used alone yielded somewhat poorer quality of life but again, patients thusly treated may differ from others with respect to stage and diagnosis.

Our survey provided no information on the rehabilitation and social support provided these patients. Routine follow-up such as we demonstrate might provide important information on the impact of such factors. Previous study at Roswell Park has shown that social support may favorably influence quality of survival among female breast cancer patients and this is a significant area for future inquiry.[9]

Quality of life is obviously more difficult to assess compared to survival or other indices of therapeutic efficacy. In spite of the inherent difficulties, experience at Roswell Park has been that certain aspects of quality of survival may be measured as a routine part of cancer patient follow-up. The data derived by these procedures may provide useful insight into the impact of modern cancer treatment practices.

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Acknowledgment. The authors are indebted to the Cancer Committee and Medical Records personnel at Roswell Park for their diligent collection of all data used in this investigation.

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The appearance of these tablets is a trademark of Ayerst Laboratories

BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)
Inderal® (propranolol hydrochloride)

BEFORE USING INDERAL (PROPRANOLOL HYDROCHLORIDE), THE PHYSICIAN SHOULD BE THOROUGHLY FAMILIAR WITH THE BASIC CONCEPT OF ADRENERGIC RECEPTORS (ALPHA AND BETA), AND THE PHARMACOLOGY OF THIS DRUG

CONTRAINDICATIONS

1) bronchial asthma; 2) allergic rhinitis during the pollen season; 3) sinus bradycardia and greater than first degree block; 4) cardiogenic shock; 5) right ventricular failure secondary to pulmonary hypertension; 6) congestive heart failure (see WARNINGS) unless it is secondary to a tachyarrhythmia treatable with propranolol; 7) in patients on adrenergic-augmenting psychotropic drugs (including MAO inhibitors), and during the two week withdrawal period from such drugs.

WARNINGS

CARDIAC FAILURE. In congestive heart failure, inhibition with beta-blockade carries the potential hazard of further depressing myocardial contractility and precipitating cardiac failure. In patients already receiving digitalis, propranolol may reduce the positive inotropic action of digitalis and may have an additive depressant effect on AV conduction.

IN PATIENTS WITHOUT A HISTORY OF CARDIAC FAILURE, in rare instances, cardiac failure has developed during propranolol therapy. At the first sign of impending cardiac failure, patients should be fully digitalized and/or given a diuretic, and observed closely: a) if cardiac failure continues, despite adequate digitalization and diuretic therapy, propranolol should be immediately withdrawn; b) if tachyarrhythmia is being controlled, patients should be maintained on combined therapy and closely followed until threat of cardiac failure is over.

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following *abrupt* discontinuation of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when INDERAL is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease, who are given propranolol for other indications.

IN PATIENTS WITH THYROTOXICOSIS, possible deleterious effects from long term use have not been adequately appraised. Give special consideration to propranolol's potential for aggravating congestive heart failure. Propranolol may mask the clinical signs of developing or continuing hyperthyroidism or complications and give a false impression of improvement. Propranolol should be withdrawn slowly, since abrupt withdrawal may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

IN PATIENTS UNDERGOING MAJOR SURGERY, beta-blockade impairs the ability of the heart to respond to reflex stimuli. Except in pheochromocytoma, propranolol should be withdrawn 48 hours prior to surgery. In case of emergency surgery, the effects of propranolol can be reversed by administration of beta-receptor agonists such as isoproterenol or levarterenol, but such patients may be subject to protracted severe hypotension. Difficulty in restarting and maintaining the heart beat has been reported.

IN PATIENTS PRONE TO NONALLERGIC BRONCHOSPASM (e.g., CHRONIC BRONCHITIS, EMPHYSEMA), administer with caution, since propranolol may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta-receptors.

DIABETICS AND PATIENTS SUBJECT TO HYPOGLYCEMIA. Propranolol may prevent the appearance of premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia, especially in patients with labile diabetes. A precipitous elevation of blood pressure may accompany hypoglycemic attacks.

USE IN PREGNANCY. Safe use in human pregnancy not established. Embryotoxic effects have been seen in animals at doses about 10 times the maximum recommended human dose.

PRECAUTIONS

Patients receiving catecholamine depleting drugs such as reserpine should be closely observed if propranolol is administered, since it may occasionally produce hypotension and/or marked bradycardia resulting in vertigo, syncopal attacks, or orthostatic hypotension.

Observe laboratory parameters at regular intervals. Use with caution in patients with impaired renal or hepatic function.

ADVERSE REACTIONS

Cardiovascular: bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, arterial insufficiency, usually of the Raynaud type, thrombocytopenic purpura. *Central Nervous System:* lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation for time and place, short term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. *Gastrointestinal:* nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis. *Allergic:* pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress. *Respiratory:* bronchospasm. *Hematologic:* agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura. *Miscellaneous:* reversible alopecia. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta-blocker (practolol) have not been conclusively associated with propranolol. *Clinical Laboratory Test Findings:* Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

HOW SUPPLIED

TABLETS

—Each hexagonal-shaped, orange, scored tablet is embossed with an "I" and imprinted with "INDERAL 10," contains 10 mg propranolol hydrochloride, in bottles of 100 (NDC 0046-0421-81) and 1,000 (NDC 0046-0421-91). Also in unit dose package of 100 (NDC 0046-0421-99).

—Each hexagonal-shaped, blue, scored tablet is embossed with an "I" and imprinted with "INDERAL 20," contains 20 mg propranolol hydrochloride, in bottles of 100 (NDC 0046-0422-81) and 1,000 (NDC 0046-0422-91). Also in unit dose package of 100 (NDC 0046-0422-99).

—Each hexagonal-shaped, green, scored tablet is embossed with an "I" and imprinted with "INDERAL 40," contains 40 mg propranolol hydrochloride, in bottles of 100 (NDC 0046-0424-81) and 1,000 (NDC 0046-0424-91). Also in unit dose package of 100 (NDC 0046-0424-99).

—Each hexagonal-shaped, yellow, scored tablet is embossed with an "I" and imprinted with "INDERAL 80," contains 80 mg propranolol hydrochloride, in bottles of 100 (NDC 0046-0428-81) and 1,000 (NDC 0046-0428-91). Also in unit dose package of 100 (NDC 0046-0428-99).

The appearance of these tablets is a trademark of Ayerst Laboratories.

Store at room temperature (approximately 25° C).

INJECTABLE

Each ml contains 1 mg of propranolol hydrochloride in Water for Injection. The pH is adjusted with citric acid. Supplied as 1 ml ampuls in boxes of 10 (NDC 0046-3265-10).

Store at room temperature (approximately 25° C).

7997/882

Reference: 1. Freis, E.D.: Hypertension (Suppl. II) 3:230 (Nov-Dec.) 1981.

Ayerst. AYERST LABORATORIES
New York, N.Y. 10017

(continued from page 186)

Some Parkinson's patients may not have the disease

Not all patients diagnosed as having Parkinson's disease actually have that condition. It has been found that in some cases patients who develop symptoms similar to those of parkinsonism in fact have a different disorder of the nervous system. According to Roger C. Duvoisin, M.D., professor and chairman of the Department of Neurology at UMDNJ-Rutgers Medical School, the disorder is a hereditary defect involving a deficiency of an enzyme which brings on symptoms resembling those of parkinsonism: unsteadiness in walking, muscular stiffness, slowness and awkwardness of body movement and a tendency to walk with shuffling steps.

Abbott reduces price to home dialysis

Abbott Laboratories today announced an average 15% reduction in the price of the fluids used in its peritoneal dialysis system for home use. The price reduction is effective November 1, 1982. The decision by Abbott is intended to accelerate the increase in the use of ambulatory dialysis and will reduce the cost of dialysis to people who must use artificial means of purifying their blood as a result of kidney failure.

Measles on way out

The dramatic decrease in measles cases over the past two decades in the United States is no reason for relaxing efforts to have all children immunized, according to Edward N. Brandt., Jr., M.D., assistant secretary for health, Department of Health and Human Services.

The nation's goal of eliminating measles as an indigenous disease by the year's end is likely to be reached, but the achievement cannot be made permanent without continued support for immunization and reporting programs.

"Patterning" treatment for brain damage may cause harm

The Doman-Delacato "patterning" method used to treat children with brain damage and other disorders "offers no special merit, the claims of its advocates are unproven, and the demands (it places) on families are so great that in some cases there may be harm in its use," concludes a new policy statement from the American Academy of Pediatrics (AAP). In its statement, the Academy cites several studies which found that the treatment showed little or no benefit and that the theory behind the method is "not consistent with generally accepted views about the nature of neurologic development." One study compared three groups of severely mentally retarded children who were treated either with patterning, motivational techniques, or routine care. There was no significant difference in improvement among the three groups, and the researchers concluded that patterning cannot be recommended over standard care.

Books Received*

CARDIAC BIOPROSTHESES

Cardiac Bioprostheses. Edited by Lawrence H. Cohn, M.D. and Vincenzo Gallucci, M.D. New York, Yorke Medical Books, 1982. Illustrated, 591 pages. Hardcover, $65.00.

ENDOCARDITIS

Infective Endocarditis and Other Intravascular Infections. By Lawrence R. Freedman, M.D. New York, Plenum Publishing Corp., 1982. Illustrated, 243 pages. Hardcover, $35.00.

NEPHROTOXIC MECHANISMS OF DRUGS AND ENVIRONMENTAL TOXINS

Nephrotoxic Mechanisms of Drugs and Environmental Toxins. Edited by George A. Porter, M.D. New York, Plenum Publishing Corp., 1982. Illustrated, 466 pages. Hardcover, $49.50.

CANCER

Hyperthermia and Cancer. By George M. Hahn. New York, Plenum Publishing Corp., 1982. Illustrated, 285 pages. Hardcover, $35.00.

DIABETES

Diabetes Mellitus and Obesity. Edited by Bernard N. Brodoff, M.D. and Sheldon J. Bleicher, M.D. Baltimore, Md., Williams & Wilkins, 1982. Illustrated, 816 pages. Hardcover, $60.00.

INFECTIOUS DISEASE

Bacterial Infections of Humans—Epidemiology and Control. Edited by Alfred S. Evans and Harry A. Feldman. New York. Plenum Publishing Corp., 1982. Illustrated, 702 pages. Hardcover, $59.50.

Magic Shots—A Human and Scientific Account of the Long and Continuing Struggle to Eradicate Infectious Diseases by Vaccination. By Allan Chase. New York, William Morrow & Co., Inc. Hardcover, 576 pages, $19.95.

ANATOMY

Segmental Anatomy. By Marvin Wagner, M.D., M.S. and Thomas L. Lawson, M.D. New York, Macmillan Publishing Co., Inc., 1982. Illustrated, 650 pages. Hardcover, $95.00.

PSYCHIATRY

Hughlings Jackson on Psychiatry. By Kenneth Dewhurst T.D., M.D., D. Phil., F.R.C. Psych., D.P.M. Oxford, England, Sanford Publications. Hardcover, 178 pages, £9.00.

BRIEF SUMMARY
PROCARDIA® CAPSULES For Oral Use
(nifedipine)

INDICATIONS AND USAGE: I. Vasospastic Angina: PROCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria: 1) classical pattern of angina at rest accompanied by ST segment elevation, 2) angina or coronary artery spasm provoked by ergonovine, or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography, the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PROCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e.g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm, or when angina is refractory to nitrates and/or adequate doses of beta blockers.

II. Chronic Stable Angina (Classical Effort-Associated Angina): PROCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or organic nitrates or who cannot tolerate those agents

In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in those patients are incomplete.

Controlled studies in small numbers of patients suggest concomitant use of PROCARDIA and beta blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs. (See Warnings.)

CONTRAINDICATIONS: Known hypersensitivity reaction to PROCARDIA

WARNINGS: Excessive Hypotension: Although in most patients, the hypotensive effect of PROCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension. These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers.

Severe hypotension and/or increased fluid volume requirements have been reported in patients receiving PROCARDIA together with a beta blocking agent who underwent coronary artery bypass surgery using high dose fentanyl anesthesia. The interaction with high dose fentanyl appears to be due to the combination of PROCARDIA and a beta blocker, but the possibility that it may occur with PROCARDIA alone, with low doses of fentanyl, in other surgical procedures, or with other narcotic analgesics cannot be ruled out.

Increased Angina: Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PROCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Beta Blocker Withdrawal: Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines. Initiation of PROCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PROCARDIA initiation. It is important to taper beta blockers if possible, rather than stopping them abruptly before beginning PROCARDIA.

Congestive Heart Failure: Rarely, patients, usually receiving a beta blocker, have developed heart failure after beginning PROCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event.

PRECAUTIONS: General: Hypotension: Because PROCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PROCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. (See Warnings.)

Peripheral edema: Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PROCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy. With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Drug Interactions: Beta-adrenergic blocking agents: (See Indications and Warnings.) Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PROCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina

Long-acting nitrates: PROCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Digitalis: Administration of PROCARDIA with digoxin increased digoxin levels in nine of twelve normal volunteers. The average increase was 45%. Another investigator found no increase in digoxin levels in thirteen patients with coronary artery disease. In an uncontrolled study of over two hundred patients with congestive heart failure during which digoxin blood levels were not measured, digitalis toxicity was not observed. Since there have been isolated reports of patients with elevated digoxin levels, it is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing PROCARDIA to avoid possible over- or under-digitalization.

Carcinogenesis, mutagenesis, impairment of fertility: When given to rats prior to mating, nifedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose.

Pregnancy: Category C. Please see full prescribing information with reference to teratogenicity in rats, embryotoxicity in rats, mice and rabbits, and abnormalities in monkeys.

ADVERSE REACTIONS: The most common adverse events include dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%. Syncopal episodes did not recur with reduction in the dose of PROCARDIA or concomitant antianginal medication. Additionally, the following have been reported: muscle cramps, nervousness, dyspnea, nasal and chest congestion, diarrhea, constipation, inflammation, joint stiffness, shakiness, sleep disturbances, blurred vision, difficulties in balance, dermatitis, pruritus, urticaria, fever, sweating, chills, and sexual difficulties. Very rarely, introduction of PROCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

Laboratory Tests: Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CPK, LDH, SGOT, and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nifedipine therapy. The relationship to PROCARDIA therapy is uncertain. These laboratory abnormalities have rarely been associated with clinical symptoms. Cholestasis, possibly due to PROCARDIA therapy, has been reported twice in the extensive world literature

HOW SUPPLIED: Each orange, soft gelatin PROCARDIA CAPSULE contains 10 mg of nifedipine. PROCARDIA CAPSULES are supplied in bottles of 100 (NDC 0069-2600-66), 300 (NDC 0069-2600-72), and unit dose (10x10) (NDC 0069-2600-41). The capsules should be protected from light and moisture and stored at controlled room temperature 59° to 77°F (15° to 25°C) in the manufacturer's original container.

More detailed professional information available on request.

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Pfizer LABORATORIES DIVISION
PFIZER INC

"I can do things that I couldn't do for 3 yrs. including joining the human race again."

"My daily routine consisted of sitting in my chair trying to stay alive."

"My doctor switched me to PROCARDIA[*] *as soon as it became available. The change in my condition is remarkable."*

"I shop, cook and can plant flowers again."

"I have been able to do volunteer work...and feel needed and useful once again."

PROCARDIA can mean the return to a more normal life for your patients—having fewer anginal attacks, taking fewer nitroglycerin tablets, doing more, and being more productive once again.

Side effects are usually mild (most frequently reported are dizziness or lightheadedness, peripheral edema, nausea, weakness, headache and flushing, each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%).

Quotes from an unsolicited letter received by Pfizer from an angina patient.
While this patient's experience is representative of many unsolicited comments received, not all patients will respond to Procardia nor will they all respond to the same degree.

© 1983, Pfizer Inc.

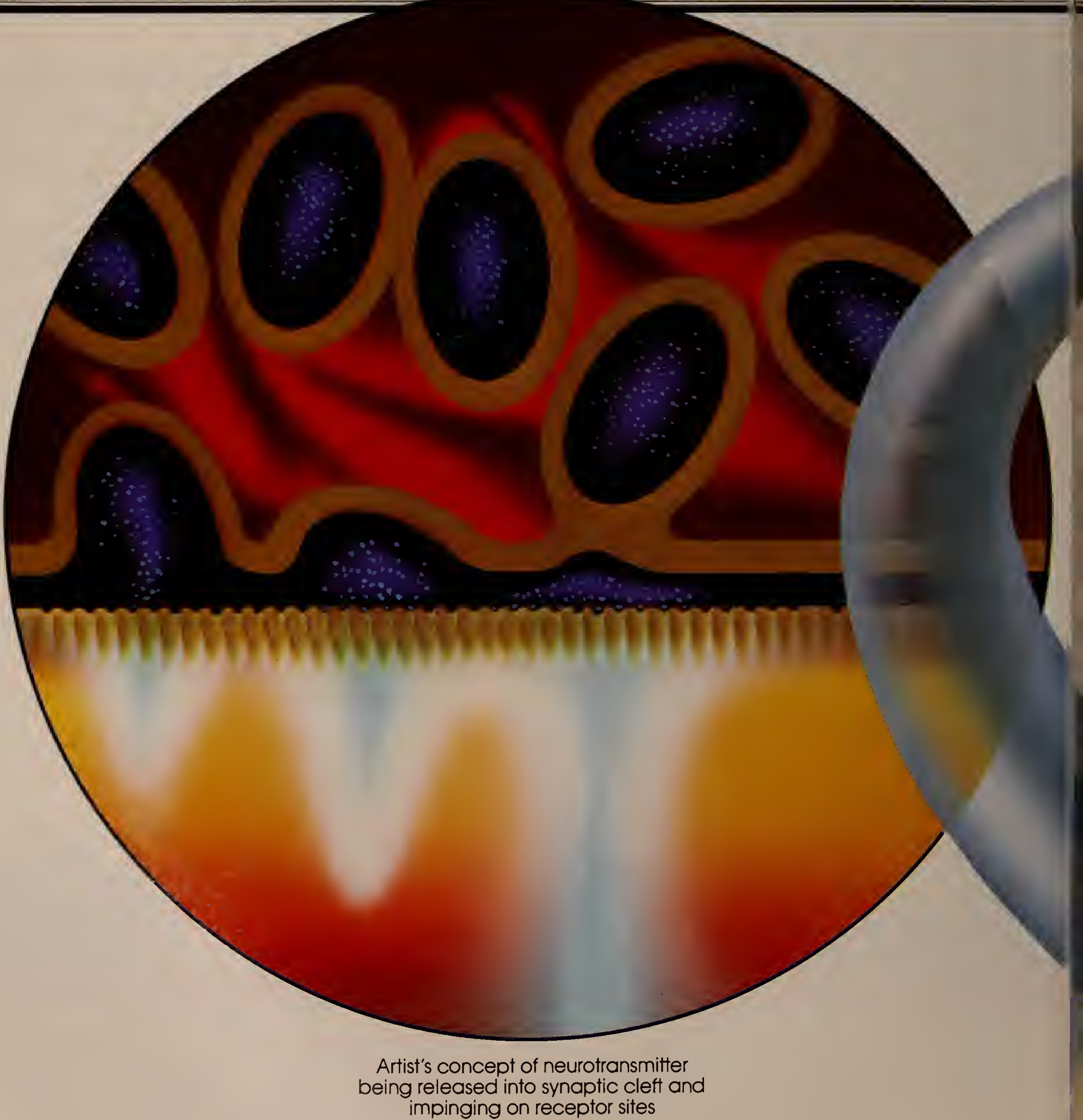
for the varied faces of angina

PROCARDIA®
(NIFEDIPINE) *Capsules 10 mg*

*Procardia is indicated for the management of:
1) Confirmed vasospastic angina.
2) Angina where the clinical presentation suggests a possible vasospastic component.
3) Chronic stable angina without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or nitrates or who cannot tolerate these agents. In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks' duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in these patients are incomplete.

Please see PROCARDIA *brief summary on adjoining page.*

VALIUM® (diazepam/Roche) IN THE FOREFRONT OF NEURORECEPTOR RESEARCH



Artist's concept of neurotransmitter being released into synaptic cleft and impinging on receptor sites

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Opening new investigative pathways into where and how Valium (diazepam/Roche) exerts its distinctive antianxiety action

New discoveries in receptor research have stimulated the search for endogenous brain substances that may be involved in the mediation of anxiety.[1-5] It has been further theorized that these substances may act as ligands that bind to the same or similar sites as do benzodiazepine molecules[5,6]—binding sites early identified with the use of ^{3}H-diazepam.[5,7] These binding sites are now postulated to be benzodiazepine receptors, since the ability of benzodiazepines to bind with the sites appears to correlate with their clinical effects.[2,4,7,8]

Present investigations into clinical relevance of binding sites. Laboratories at Roche have conducted research to identify and isolate substances that may prove to be endogenous ligands, but no definitive identification has yet been made. Researchers are also studying substances which do not bind, but rather interact with the benzodiazepine binding sites—most notably gamma-aminobutyric acid (GABA)—and are postulated to mediate certain pharmacologic and clinical benzodiazepine effects.[2-4,9,10]

Under especially intense investigations are the GABA receptors and the benzodiazepine binding sites themselves—apparently constellations of closely linked but not identical structures.[8]

Future implications for improved therapy. In future work, Roche researchers and other scientists hope to identify and characterize various differential sites in the brain, which may result in more specific diagnostic and therapeutic approaches.

2-mg, 5-mg, 10-mg scored tablets

Valium® (IV)

diazepam/Roche

THE RESEARCH AND CLINICAL LEADER

Please see brief summary of product information and references on the following page.

ROCHE®

VALIUM® Ⓒ
(diazepam/Roche)

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not as sole therapy).

The effectiveness of Valium in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

> ***Usage in Pregnancy:*** **Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

The clearance of Valium and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Anxiety disorders, symptoms of anxiety, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

How Supplied: For oral administration, Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100* and 500;* Prescription Paks of 50, available in trays of 10.* Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25† and in boxes containing 10 strips of 10.†

*Supplied by Roche Products Inc., Manati, Puerto Rico 00701
†Supplied by Roche Laboratories, Division of Hoffmann-La Roche Inc.,
Nutley, New Jersey 07110

References: **1.** Tallman JF *et al*: *Science 207*:274-281, Jan 18, 1980. **2.** Bunney WE Jr: *Psychiatr Ann 11*:11-15, Jan 1981. **3.** Davis JM *et al*: *J Clin Psychiatry 42*(11) Sec 2:4-14, Nov 1981. **4.** Study RE, Barker JL: *JAMA 247*: 2147-2151, Apr 16, 1982. **5.** Braestrup C, Nielsen M, Olsen CE: *Proc Natl Acad Sci USA 77*:2288-2292, Apr 1980. **6.** Bosmann HB, Case KR, DiStefano P: *FEBS Lett 82*:368-372, Oct 1977. **7.** Braestrup C, Albrechtsen R, Squires RF: *Nature 269*:702-704, Oct 20, 1977. **8.** Snyder SH: *Psychosomatics 22*:986-989, Nov 1981. **9.** Rickels K: *J Clin Psychiatry 42*(11) Sec 2:40-44, Nov 1981. **10.** Haefely WE: *Br J Psychiatry 133*:231-238, Sep 1978.

ROCHE
ROCHE PRODUCTS INC.
® Manati, Puerto Rico 00701

Abstracts

Lane DS, Fine HL: Compliance with mammography referrals: implications for breast cancer screening. ***New York State J Med 1983;*** 83:173–176.

Among 1,822 women who participated in a breast cancer screening project, 561 were referred for mammography following National Cancer Institute criteria, and 44.6% of these complied with this referral. Changing federal funding policy permitted project payment for mammography for roughly one half of the referrals, creating a natural experiment for exploring the influence of cost on compliance. To understand the variations in compliance behavior, statistical comparisons were made between women who obtained mammography and those who did not on a variety of variables, and the subgroups of asymptomatic and symptomatic women were examined separately. Significant relationships were found between compliance and the self-reporting of breast symptoms, the physical findings on physician examination, and the source of payment for mammography. The interaction between these three variables is described. Compliance rates ranged from a low of 7.6% for women who were asymptomatic with normal examination findings and who had to pay for mammography to 92.5% for women who were symptomatic with abnormal findings who had mammography free of charge. Preliminary evidence suggests that public awareness of radiation hazards may play a role in patient noncompliance.

Yoon JJ, Wu RHK, Esquea AE: Insulin, glucagon, and growth hormone in relation to clinical conditions in premature infants. ***New York State J Med 1983;*** 83:178–184.

Plasma insulin, glucagon, and growth hormone were measured at 0–12, 13–24, 25–48, 49–72, and 73–96 hours of age, and were compared to birth weight above or below 1,000 g, gestational age above or below 32 weeks, size appropriate or small for gestational age, and the presence of chronic intrauterine stress, perinatal asphyxia, CNS hemorrhage, and mortality in 31 premature infants. Clinical care was not altered for this study. Plasma insulin very often was undetectable (85.2%). As opposed to insulin, plasma glucagon was detected in most of the samples (75.4%). Plasma levels of insulin and glucagon were not related to the various clinical conditions other than the birth weight. Infants ≤1,000 g more often had measurable levels of insulin and glucagon than did those weighing over 1,000 g. This finding was noted only when they were appropriate for their gestational age. Premature infants with adequate intrauterine growth seemed to have adequate insulin secretion before their weight reached 1,000 g and were ready for future fetal growth. When the actual growth spurt took place, these infants often did not have circulating insulin, suggesting that circulating insulin detected may not be the biologically active form. Ample growth hormone was detected in most of the samples. In contrast to insulin, growth hormone did not seem to be related to fetal growth. Infants ≤1,000 g with perinatal

(continued on page 255)

Transduodenal Endoscopic Decompression of Obstructed Bile Ducts

Nonoperative decompression procedures for bile-duct obstruction are used for preoperative management or for palliation in patients who are surgically unresectable. In the present report, an endoprosthesis was placed transduodenally via the papilla of Vater in 48 patients with obstructive jaundice. Complications were limited to infection in three patients and malfunction of the endoprosthesis in three which were readily corrected at follow-up endoscopy. The transduodenal approach for decompression is a safe, effective alternative in the management of biliary obstruction.

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There has been growing interest in nonoperative decompression procedures for the relief of obstructive jaundice, either as a temporary measure preoperatively, or for long-term palliation and management of obstruction for unresectable diseases.[1-7] Beyond the relief of pruritis or correction of lipid malabsorption effected by biliary drainage is the reduction in operative mortality rates resulting from this approach.[8] Risk factors such as age and etiology are considerations in patients with obstructive jaundice and underscore the need for optimum patient preparation before surgery if morbidity and mortality are to be reduced.[9,10]

In obstructive jaundice, the beneficial results of reduction of serum bilirubin levels and restoration of physiologic flow of bile prior to definitive surgery have been recognized,[11] leading to the earlier concept of two-stage surgical techniques.[12] Similarly, benefits are realized with percutaneous or endoscopic drainage techniques permitting nonoperative alternatives. In this report, we present the results of transduodenal decompression techniques for the management of biliary obstruction.

Patients and methods

From October 1980 to April 1982, endoscopic insertion of a biliary endoprosthesis was attempted in 53 patients and successful in 48 (90.5%). The 29 women and 24 men had a mean age of 73.4 years with a range of 36 to 92 years. The cause of biliary obstruction was malignancy in 43 patients (89.5%) and retained common-duct stones in five (10.5%). Six patients had elective surgery following decompression, and 42 had palliative decompression for unresectable disease functioning for periods of two to 18 months.

After obtaining informed consent for endoscopic retrograde cholangiopancreatography (ERCP) and duodenoscopic sphincterotomy, a diagnostic ERCP was performed. Upon confirmation of obstruction to the biliary tree, a spring guide wire, 0.035 in in diameter and 480 cm in length (Cook, Inc, Bloomington, Ind) is advanced through the cannula and into the bile duct through the intact papilla, or, if a sphincterotomy has been performed, through the incision. A pigtail catheter 12 to 15 cm in length with an internal diameter of 1.4 to 2.9 mm and external diameter of 1.6 to 3.1 mm is advanced, pigtail end first, over the guide wire using another catheter as a pusher. Fluoroscopic confirmation of the position of the catheter is made, and once the endoprosthesis is in place, the guide wire is slowly withdrawn until the proximal end of the endoprosthesis lies free in the duodenum (Fig 1).

Results

Endoprostheses were successfully placed on 48 occasions, functioning from one to 18 months. Two patients had cholangiocarcinomas involving the proximal common bile duct and required surgical decompression for palliation after percutaneous drainage also failed. Other failures included two pancreatic carcinomas too firm to permit passage of the guide wire into the bile duct, and cholangiocarcinoma producing obstruction at the porta hepatis. Clinical or biochemical evidence of recurrent obstruction has been noted in three patients (6.3%), requiring either endoscopic removal and replacement of the occluded prosthesis or irrigation. In five patients two or more endoprostheses have been used to improve drainage (Fig 2). Only three patients have developed cholangitis; all responded to treatment with antibiotics and endoscopic exchange of the endoprosthesis. There have been no complications of bleeding, peritoneal leakage, peritonitis, or pulmonary compromise.

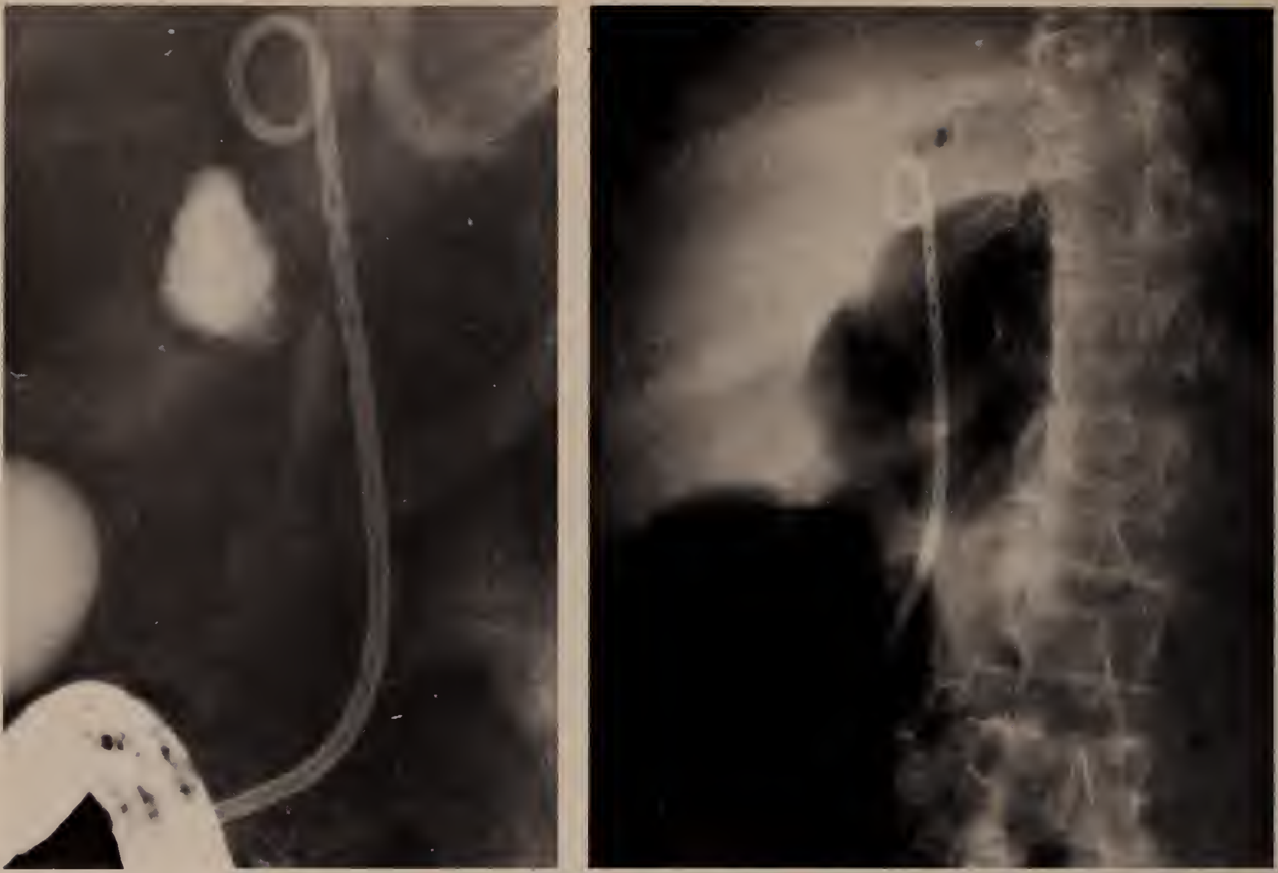

FIGURE 1. X-ray film demonstrating large-bore pigtail catheter in place.

Comment

Percutaneous biliary decompression evolved as a therapeutic adjunct to percutaneous transhepatic cholangiography (PTC).[1–4] In the earliest reports, the dilated biliary tree was punctured transhepatically, and a catheter was placed into the bile duct to drain externally.[1] Limitations to this method include bleeding diathesis, sepsis, iodine sensitivity or markedly elevated serum bilirubin,[2] ascites, and successful completion of PTC.[3] The loss of water, electrolytes, and bile salts, bile irritation of the skin and bile peritonitis, all deficiencies of the external drainage approach, prompted development of internal-drainage techniques.[5]

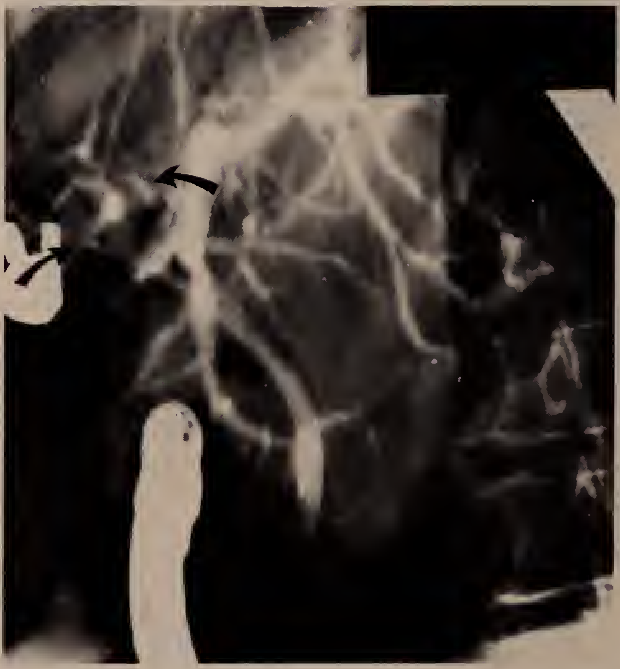

FIGURE 2. X-ray film demonstrating two pigtail catheters draining both right and left intrahepatic systems.

Percutaneous insertion of an endoprosthesis has the advantages of restoring biliary circulation and maintaining nutrition without causing depletion of bile constituents. However, the puncture wound required for the insertion of a percutaneously placed endoprosthesis potentiates the problems of bile peritonitis, subcapsular or intraperitoneal hemorrhage, and infection.[4] Care must be taken to enter the biliary system intrahepatically so that the puncture is sealed by liver tissue. Although an endoprosthesis may be manipulated during insertion,[6] control of the device is not possible after its place-

Comparison of Results of Various Techniques for Biliary Decompression

Series/Methods	Patients/ Success (%)	Complications (%) Bleeding/ Vascular	Infective	Malfunction
Siegel (present study)/endoscopic with endoprosthesis	48/53 (90.5)	0	3 (6.3)	3 (6.3%)*
Dooley et al 1981/percutaneous with endoprosthesis	41/44 (93)	0	6 (14.6)	2 (4.8%)†
Pollock et al 1979/percutaneous with combined internal external drainage	41/43 (95)	4 (10)	7 (17)	NA
Tylen et al 1977/percutaneous with external drainage	83/100 (83)**	8 (9.6)	3 (3.6)	NA

* Endoprostheses cleansed successfully, restoring function.
† One death related to puncture of ducts outside of liver.
** Does not include 22 patients with failure to obtain PTC.
NA = Not available.

ment, and exchange or removal because of infection or occlusion requires endoscopy or surgery.[7]

In assessing the safety of percutaneous biliary decompression, complications of PTC must first be considered.[7] Although morbidity and mortality with PTC alone were rare in early reports, the widespread use of PTC has witnessed significant increases in complications.[13,14] Similar increases in complication rates with percutaneous decompression techniques may also be anticipated, particularly in view of the increased size of the puncture wound of the liver. Complications of hemorrhage, sepsis, hemothorax, and pneumothorax are directly related to this larger puncture would.[15,16] Vascular lesions of the liver such as arteriohepatic and anteroportal venous fistulas, aneurysms, and hematomas have been reported to occur following percutaneous biliary decompression in one third of patients[17] and may be responsible for hemorrhage or subclinical bleeding.

Endoscopically placed endoprostheses approach the problem of biliary decompression via the papilla of Vater.[18] Although technically more difficult to insert than percutaneously placed prostheses, this approach avoids the repeated puncture of the liver capsule and is not limited by coexisting medical problems. Multiple prostheses may be inserted and new endoscopes with larger biopsy channels allow for drains up to 10 French in diameter to be placed. Subsequent surgery is not impeded because of local or diffuse peritonitis as seen with the percutaneous approaches. Occluded endoprostheses may be exchanged or removed endoscopically, cleared by inserting a guide wire, or irrigated with saline using a tapered cannula.

The results of the present series compare favorably with previous reports of percutaneous drainage technique (Table). Success rates for placement of an endoprosthesis approach those for diagnostic ERCP,[19] while complications have been limited to infections. Failure to place an endoprosthesis endoscopically still leaves the option of percutaneous drainage or surgery without affecting the clinical status. The transduodenal approach is a safe, effective, and valuable alternative for biliary decompression in a broad group of patients.

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Unilateral Asterixis

Clinical significance of the sign

Bilateral asterixis is an indicator of metabolic disorder of the central nervous system. Unilateral asterixis indicates a focal lesion in the contralateral hemisphere. Asterixis may be seen in the upper extremity, the lower extremity, or the face. In this article we present two cases of unilateral asterixis resulting from brain tumor and discuss 37 cases from the literature.

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Asterixis, otherwise known as liver flap or flapping tremor, was first described in 1949 by Adams and Foley,[1-3] and studied by Conn[4-7] and by Leavitt and Tyler[8,9] in the 1960s. The causes were hepatic encephalopathy in the first instances. It was later found that ammonium use, or a high protein intake, or blood in the gastrointestinal tract in patients with hepatic disease might produce encephalopathy and asterixis. Subsequently, several drugs were found that might also precipitate encephalopathy in hepatic disease, including acetazolamide and chlorothiazide. The same tremor and flap were later found in patients with normal liver function and were associated with the toxemia of virtually any infection, electrolyte abnormality, high doses of sedatives and tranquilizers, as well as with many other drugs including any of the narcotics[7] or phenytoin.[10] It was also found to occur in uremia, polycythemia, cardiac failure, chronic pulmonary insufficiency with CO_2 accumulation, idiopathic steatorrhea, Whipple's disease, other malabsorptive states, magnesium deficiency, bromide intoxication, and hypoxia.[7] More recently it has been seen and described in patients using valproic acid[11,12] and in association with metrizamide myelography.[13] A glance at these conditions clearly indicates metabolic derangement of brain activity as the primary cause. Studies by Conn[7] and later by Leavitt and Tyler[9] revealed that, if formally tested, mental function was decreased and the EEG showed diffuse slowing in such patients.

In the past ten years 37 cases of unilateral asterixis have been reported in the literature. In unilateral asterixis the association has always been with structural neurologic disease of the contralateral hemisphere. The asterixis has been noted in the arms, face,[14,15] or leg on the same side as the arm. The site of lesions causing asterixis has been frontoparietal, mesencephalic, or thalamic-internal capsular, and the pathologic condition has been tumor, hemorrhage, or infarct. We will present two further cases, sum up the literature, and discuss the elicitation of this sign.

Case reports

Case 1. A 61-year-old white man was admitted with a five-day history of right-sided headache and a two-day history of slurred speech. One day prior to admission his wife noticed episodic twitching movements of his left hand and left leg. The patient also noticed nausea, unsteadiness of gait, and had vomited.

Examination revealed a lethargic patient who was rousable. He was afebrile. His neck was supple. There was mild dysarthria related to a mild left central facial weakness. The remaining cranial nerves, optic fundi, and visual fields were normal. Power, reflexes, and sensation were normal and the plantar responses were flexor. There was very marked asterixis of the outstretched left hand and of the dorsiflexed left ankle. When the right side was tested there was minimal but definite asterixis of both hand and foot.

The EEG revealed some right-sided delta wave activity. No metabolic abnormalities were found in the blood. A computed tomography (CT) scan revealed a 6-cm tumor in the right frontoparietal region. A subtotal excision of the lesion was undertaken. The histopathology demonstrated malignant astrocytoma. The patient had a complicated postoperative course and died on the tenth postoperative day of a cardiac arrest.

Case 2. A 62-year-old white man had a one-month history of "dizziness" followed by the gradual onset of clumsiness of the left arm, without complaints of headaches or visual disturbances. For two days he had noted some slight clumsiness of the left leg on walking and some numbness of the left lower lip as well as slight slurring of speech. One day before admission he developed a single left focal seizure which began in the left side of the face and traveled down the left arm.

Examination revealed an alert patient with slight slurring of speech and a left central facial weakness. Examination showed the remaining cranial nerves to be normal. There was minimal weakness of the left upper and lower extremities; power on the right side was normal. Deep tendon reflexes were equal. The plantar response was extensor on the left and flexor on the right. Marked unilateral asterixis was evident in his outstretched left arm and in the left dorsiflexed ankle whenever tested.

CT scan revealed a tumor in the right frontoparietal region with a large amount of surrounding edema and a 7-mm shift of the midline. A right carotid angiogram confirmed the location of the lesion. Results of a metastatic survey were negative. The EEG demonstrated mild slowing on both sides, left more than right. The tumor was excised; the pathologic examination revealed an anaplastic astrocytoma. Postoperatively he received radiotherapy and chemotherapy.

Comment

Asterixis is elicited by having the patient maintain his arms extended in front of him with the wrists dorsiflexed. The eyes are then closed. The test will only be positive if the person is sitting, as gravity is required to demonstrate the flappng. The test is often found to be negative if the patient is lying flat on his back and the hands are extended in front of him with the wrists dorsiflexed. In the presence of a metabolic derangement, after a latent period of 3 to 30 sec, mild tremor of the fingers may be seen followed by a sudden drop of the hands at the wrists, followed by restitution to the original position. This may occur simultaneously in the two hands or asynchronously. It may be regularly or irregularly recurrent.

We have noticed in our two patients that asterixis may occur and be equally prominent at the ankles. If the patient dorsiflexes the foot at the ankle and holds it, almost precisely the same tremor and the same flapping motion can be seen. This has been noted previously by Plum and Posner,[14] by Degos et al,[15] and by Donat.[16] The last two studies, in fact, indicated that the same finding may be seen in the face or tongue as well.

The occurrence of unilateral asterixis has been the subject of several papers over the past ten years[14–21]; review of these plus our own patients reveals a total of 39 patients documented in the literature with unilateral asterixis. Tumor and cerebral infarct are the most frequent causes, with intracerebral hemorrhage, subdural hematoma, brain abscess, and hypoxia being less common (Table I). Surgical trauma accounted for asterixis for a brief period during thalamic stereotactic surgery in nine consecutive patients.[17]

TABLE I. Reported Causes of Unilateral Asterixis

Cause	Number of Cases
Tumor	8[15,18]
Infarct	7[4–7,15,19]
Hemorrhage	4[15,16,19]
Subdural hematoma	2[14,20]
Abscess	1[15]
Hypoxia	3[15,21]
Surgical trauma	9[17]
Unknown	5[15]
TOTAL	39

TABLE II. The Sites of Lesions Causing Unilateral Asterixis

Site	Number of Cases
Frontoparietal	12[15,18]
Mesencephalic	5[15]
Thalamic/Capsular	14[15–17,19]
Subdural	2[14,20]
Uncertain	6[4–7,14,15,20,21]
TOTAL	39

The sites of lesions causing asterixis included a frontoparietal location in 12 cases, mesencephalic in 5, thalamic/internal capsule in 14, and subdural in 2 (Table II).

There has been some speculation as to the mechanism of asterixis. It has been known since 1964 that the mechanism of asterixis is a sudden cessation of electrical activity in the extensor muscles resulting in a lapse of sustained voluntary posture lasting 35 to 200 ms.[9] This has been considered a form of "negative" myoclonus by some.[22] More reasonable, however, is the thought that it is produced by an intermittent inhibition of the spinal neuronal system that mediates voluntary tonic extension of a part of the limb. It has been further theorized that lesions of chemical or structural type produce this intermittent inhibition of the spinal neuronal system by virtue of defects in the mesencephalon or thalamus or, according to the data that we have obtained, in the frontoparietal region.

Conclusions

1. Asterixis is a phenomenon that occurs when an extremity is held in a posture against gravity. If gravity is not posed against the contracting muscle the phenomenon will not be seen.
2. Asterixis may involve the wrist, ankle, face, or tongue.
3. When bilateral, its causes are almost always metabolic disturbances of brain function; when unilateral, asterixis is caused by structural disorders of the contralateral hemisphere.
4. The most likely causes of unilateral asterixis are tumor, infarct, or hemorrhage.
5. The major locations for lesions that may accompany unilateral asterixis are frontoparietal, thalamic/capsular, or mesencephalic.

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Medical Problems at a Summer Camp

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There are approximately 160 "sleep-away" summer camps accredited by the American Camping Association in New York State. Almost all these camps employ the services of a full-time physician, as well as two registered nurses, to provide medical care for both campers and staff. Due to temporal constraints, physicians usually divide the eight-week camping season, so that one is present for the initial four weeks and another for the remaining four weeks. Conversely, nurses generally remain for the entire eight weeks, thereby contributing to continuity of care.

It is the purpose of this report to review the health care services provided during an eight-week season in 1981 on the boys' side of a "brother-sister" summer camp. It is not the intention of the authors to suggest that their experience is characteristic of other camps, or of the girls' side of the same camp, or even the same camp in other years. Indeed, problems may vary significantly.

Demographic data

There were 159 upper-middle-class white males, ranging in age from six to 15 years, who attended camp for the eight-week season in 1981. In addition, there were approximately 90 staff members, including counselors, waiters, and kitchen and maintenance help. This report is limited to campers only.

Preexisting medical conditions

There were 12 campers (8%) who had medical conditions of significance prior to their arrival at camp.

Two campers had diabetes mellitus, both of whom self-administered insulin, and one of whom monitored his blood glucose with reagent strips (Dextrostix) and a reflectance colorimeter (Ames Eyetone). One camper had had an absent left tympanic membrane secondary to a cholesteatoma five years earlier, necessitating his wearing a prosthetic device in the external auditory canal when swimming or showering. Two campers were hyperactive, and took methylphenidate hydrochloride (Ritalin) throughout the season. Three campers had asthma, and took bronchodilators on an ongoing basis. One camper took thioridazine (Mellaril) daily for a chronic psychiatric disorder that was not characterized further. One camper had been diagnosed as having anorexia nervosa three months prior to the camp season, following a weight loss of 30 lb over five months (from 130 to 100 lb). Two campers had seizure disorders (one with a history of petit mal and one with a history of rolandic seizures), both well controlled on medication, ethosuximide (Zarontin) and phenytoin sodium (Dilantin), respectively.

In addition, 13 campers had seasonal or perennial allergies, for which an antihistamine was taken on an ongoing or intermittent basis. Three of these campers were being desensitized, and received periodic injections of allergenic extract during the season; 11 campers were allergic to penicillin.

These data were provided to the medical staff by way of standardized health and immunization record cards, which were supplied by the camp and completed by each camper's private physician prior to the beginning of the season. These cards were reviewed by the physician and nurses before the arrival of the campers. All campers were required to be fully immunized against tetanus, diphtheria, pertussis, poliomyelitis, and measles. Pertinent historical notes, such as allergies and medications prescribed, were recorded on the cards, in addition to the results of a recently performed physical examination. Parents provided explanatory notes if a pertinent, health-related problem existed, or if they wished to be notified prior to any treatment being administered. Each card also contained a statement of general release, which granted the camp directors authorization to act in lieu of parents for purposes of consent in a situation requiring emergency treatment.

Campers with preexisting medical conditions necessitating treatment generally provided their own medication from home, which was retained at and dispensed or administered from the infirmary/dispensary.

A screening physical examination was performed on each child during the first day of camp, primarily to rule out contagious disease. In addition to recording height and weight, inspection of the scalp, throat, and skin was performed (to detect pediculosis capitis, streptococcal pharyngitis, and rashes, respectively). One camper was discovered to have the characteristic rash of poison ivy, which had been contracted prior to the camping season. No other abnormal findings were detected. Cardiac auscultation revealed no abnormalities.

Facilities, supplies, and administrative procedures

The medical facility consisted of an inpatient infirmary and an outpatient dispensary (collectively known as "the infirmary") within the same building. The facility was used for no other purpose. The nurses slept in private rooms contiguous with the infirmary, while the physician slept in quarters physically separate from, but attached to, the dispensary.

The infirmary contained 15 inpatient beds, three of which were located in isolation rooms. Linen and bedding were for infirmary use only. A high ceiling and window fans kept the area relatively comfortable during hot summer days. A refrigerator contained medication as well as refreshments and snacks for both the diabetic campers and the infirmary staff. Food was served to inpatients on the premises.

The dispensary contained appropriate diagnostic equipment, as well as orthopedic and minor surgical supplies and medication not requiring refrigeration. However, it is recommended that the physician provide his own stethoscope, otoscope, and light, since these instruments are used most frequently and the quality of camp-supplied equipment may be suboptimal. The camp was very cooperative in accommodating the physician's and nurses' requests for specific medications and supplies. There was, however, a chronic shortage of bandages (Ace) and crutches of a size suitable for children, due to the relatively high frequency of injuries to the lower extremities.

To evaluate or reevaluate routine problems, "sick call" was held after each meal. Immediate or emergency care was always available. Campers with an oral temperature as high as or more than 100°F were administratively admitted to the infirmary until afebrile. All other admissions (and discharges) were based on the judgment of the physician. X-rays and laboratory tests (other than urinalyses) were performed at the local community hospital. Consultation with local physicians was always available. Transportation of campers to the hospital was provided by camp vehicle. When such a vehicle was unavailable, one of the nurses provided transportation in a personal vehicle.

Records of all dispensary visits, infirmary admissions, accidents, x-rays, laboratory reports, and consultations were prepared and/or filed in the dispensary. Copies of pertinent records were provided to camp directors for their files and for insurance claims. Parents were notified by mail if a camper was admitted to the infirmary for more than 24 hours. In an emergency, parents were notified immediately by telephone.

Infirmary admissions

Nine campers, all "Seniors" (14 to 15 years old), were admitted for exhaustion, which required a few hours of undisturbed sleep. (Seniors had an 11:30 PM curfew, but often did not fall asleep until considerably later; reveille was at 7:30 AM.) One senior was admitted for observation after sustaining a kick in the face while tending goal during an intercamp soccer match. None of the above required overnight admission.

Four campers were admitted overnight to prevent weight bearing following knee or ankle trauma (no crutches were available), while awaiting x-rays to be taken the following day. Two campers were admitted overnight due to nausea and vomiting postin-

Dispensary Visits

Week No.	Ankle Sprain	Finger Sprain	Knee Sprain	Wrist Sprain	Other Sprain	Fracture	Abrasion	Laceration	Blister	Splinter	Sunburn	Insect Sting/ Bite	Rash
1	18	3	11	8	9	1	18	13	6	5	16	6	23
2	9	4	8	11	7	0	11	7	1	3	2	3	5
3	8	10	6	4	12	1	16	7	2	3	1	8	1
4	6	2	5	4	1	1	11	4	0	3	0	2	3
5	12	7	4	4	6	2	4	4	1	0	2	1	3
6	9	4	3	6	6	0	8	6	0	1	0	1	2
7	4	5	4	1	2	0	4	1	1	1	3	1	7
8	4	7	0	1	2	0	0	4	1	1	0	2	2
TOTALS	70	42	41	39	45	5	72	46	12	17	24	24	46

gestion of large quantities of pizza. Two campers were admitted for observation because of fevers of more than 100°F.

There were no other admissions to the infirmary, and the total for the season was anomalously low.

Dispensary visits

The accompanying table summarizes dispensary visits for each of the eight weeks of camp, according to diagnostic category or anatomic site of chief complaint.

Trauma in its various forms represented a significant percentage of visits, which declined as the summer progressed. Twenty seven x-rays of extremities revealed four fractures (two fractured thumbs, one "boxer" fracture, and one fractured fifth metatarsal). Two campers required x-rays of the nasal bones, the films of which revealed a fractured nose in one. One laceration was sutured in the dispensary; no other lacerations required sutures. Three campers were referred for orthopedic consultation following knee injuries. One camper was referred for ophthalmologic consultation following an eye injury.

One case of pediculosis capitis was discovered in a six-year-old camper during the first week. He was treated with shampoo (RID), his entire group received prophylactic (RID) head washes, linen and bedding were washed, and the bunk was scrubbed down. During the second week, two additional campers within the group were discovered to have pediculosis capitis. At that time, the same procedure was repeated. No other case was discovered, despite periodic examinations, until the seventh and eighth weeks of camp, at which time 22 additional cases were perceived. Seventy-two campers were treated with shampoo (RID), either therapeutically or prophylactically, and all parents were apprised of the problem by mail shortly after the end of camp.

Miscellaneous dispensary visits of interest included the inhalation of an antifungal spray, zinc undecylenate (Desenex), hyperventilation syndrome, and insomnia following an "hypnotic trance" induced by a fellow camper. Hypoglycemic reactions occurred three times during the last two weeks of camp in one of the two diabetic campers. One required intravenous dextrose.

The camper with the absent left tympanic membrane developed pseudomonas otitis media after having been squirted in the ear with a water pistol. The camper with anorexia nervosa maintained his weight at 97 lb until the seventh week, at which time he was found to have reduced to 90 lb and was taken home by his parents.

Comment

Patterns of medical problems encountered in summer camp are multifactorial. Anticipation and preplanning may not prevent problems, but can allow the medical staff to prepare for them. This requires an awareness of the origins of these problems. Some examples follow. The reader may be able to adduce others from the table.

Trauma to the lower extremities occurred with greater frequency during the first week of camp than at any other time. This was due, no doubt, to uncommon stresses placed on weight-bearing joints and associated soft tissues in previously sedentary campers. However, attempting to ambulate across as yet unfamiliar terrain may have been a contributory factor.

A disproportionately large number of injuries occurred after dinner, between 6:45 PM and 8:30 PM. In analyzing this pattern, a number of possible explanations emerge: (1) campers were tired after a long day of activity and, therefore, less careful, (2) the sun was setting, resulting in both less ambient light and bright, often blinding sunlight at the western horizon and (3) the rough nature of evening activities, such as "capture the flag," "Johnny on the pony," etc.

Otitis media and external otitis increased significantly during the third and fourth weeks, reflecting the increasing number of campers swimming in "deep water" and diving as skills improved, as well as the longer duration of swim periods as the lake temperature rose. One camper was referred for ear, nose, and throat consultation for severe, unilateral external otitis.

The high incidence of rashes during the first week

Dispensary Visits

Tinea Pedis	Pediculosis Capitis	Skin Infection	Eyes	Ears	Throat	Gastroenteritis	Asthma	Upper Respiratory Infection	Headache	Allergy	Miscellaneous	Follow-up	TOTALS
1	1	7	7	9	10	10	5	15	15	1	7	30	255
1	2	1	7	5	7	10	1	13	8	1	7	45	179
9	0	2	6	27	7	10	1	11	10	0	9	85	256
0	0	3	5	20	8	11	1	4	12	2	9	71	188
4	0	0	2	2	8	11	1	7	8	1	10	30	134
0	0	1	1	5	8	8	1	8	14	0	7	10	109
0	8	0	3	1	11	6	1	4	8	0	6	19	101
0	14	1	7	2	8	3	2	17	3	2	2	14	99
15	25	15	38	71	67	69	13	79	78	7	57	304	1321

was related to the presence at that time of the gypsy moth caterpillar, which can elaborate venom at the base of nettling hairs. Alternatively, the moderate increase in insect stings/bites during the third week was partially related to an increase in the mosquito population, which occurred at that time, following heavy rainfall at the end of the first week.

The fairly common complaint of "sore throat" without any positive physical findings may have resulted from the tendency of campers to shout, particularly at athletic events and in the dining room, on an ongoing basis.

Conclusion

In addition to an enjoyable one or two months in the country, the camp physician and nurses can sharpen their skills in a variety of areas including, but not limited to, sports medicine, emergency care, orthopedics, pediatrics, epidemiology, preventive medicine, psychiatry, and dermatology. Furthermore, providing health care to children without the presence of their parents can be an extremely rewarding and gratifying experience.

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Summer Research Training Program in Biomedical Sciences

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* Supported by Internal Grant #3-780 from the Long Island Jewish-Hillside Medical Center.

During the summers of 1977 through 1979, we conducted a formal research training program in biomedical sciences for undergraduate college and medical and dental students. The program was designed to provide the student with an understanding of selected current concepts in biomedical sciences and an opportunity to participate in a current research project at our medical center. We describe the positive accomplishments as well as negative outcomes of the program.

Student eligibility and selection

Approximately 200 college students, nearly all majoring in one of the natural sciences or in premedical or predental studies, applied each year for the program. They learned of the availability of the program through their school or from a physician or other person associated with our medical center or by seeing announcement posters, which were prominently displayed throughout the medical center and on school bulletin boards.

In addition to completing an application form requesting biographic information, students were required to submit transcripts of all college and medical and dental school grades available up to the time of the application and at least two letters of recommendation from professors in natural, physical, or behavioral sciences at the student's university or from prior research supervisors. Students were also required to write and submit an essay stating their motivation, specific research interest, previous research experience, and future plans. A limited number of stipends were available and were awarded based on a combination of scholarly achievement and financial need.

Description of the program

During each of three summers, the program was conducted for an eight-week period. Successful applicants were assigned to work on a specific research problem in the laboratory of a faculty member. Laboratories that participated in the program included molecular biology, immunology, hematology, microbiology, cell biology, rheumatology, endocrinology, clinical chemistry, research psychiatry, experimental thoracic surgery, dentistry, pediatric cardiology, gastroenterology, and gynecologic pathology. Each student preceptor oriented the student to the laboratory and the specific research project and supervised the student's work.

In addition to the laboratory experience, students attended a series of thrice-weekly lectures and demonstrations specifically organized for the program. These sessions included a variety of topics such as research planning (eg, experimental design and statistical analyses); instrumentation; analytic methods, including the use of radioisotopes and radioimmunoassay; functions of and methods used in biochemistry, hematology, microbiology, and other hospital laboratories; clinical physiology and pathology, such as host defenses, blood coagulation, and cellular physiology; and medical ethics. Several seminars and a final program evaluation were also part of each summer's program.

Results

During the three summers that the program was conducted, 30, 25, and 22 successful applicants were enrolled, respectively. There were approximately twice as many males as females. The mean college grade point average of the students was 3.5. Several minority students were enrolled each year. Although all the students were permanent residents of Queens, Nassau, or Suffolk counties in metropolitan New York City, the students were attending various colleges and universities throughout the United States. Most of the students were sophomores or juniors in college, with a small number who were college freshmen or seniors, or first-year medical students.

At the end of the program each year, the students were asked to give written positive and negative criticism. Most of the students felt that the overall program was a very worthwhile learning experience. Some students used rhetorical statements in describing the program using phrases such as "fantastic, tremendous, extremely beneficial, excellent opportunity, and the most fascinating experience I have ever encountered." Other students were more subdued in their praise saying the program was "rewarding, beneficial, quite good, valuable, and very enlightening."

The reactions of the students to the amount of supervision provided to them in their research laboratory were mixed. Some felt they were supervised and not pampered. Others felt they were given adequate responsibility and freedom. A minority felt they were not sufficiently supervised. All agreed that a good supervisor is crucial and that without the commitment and dedication of the supervisor toward the student, a large part of the learning experience is lost.

Many of the students suggested that they be given tours of all (or many) of the research laboratories throughout the medical center to give them a better overview of the breadth and depth of the research activities being conducted in various departments. Some of them also suggested that they be permitted to make clinical rounds on the wards and see patients.

The major criticism of the program was addressed to the lecture series. Although most students found the lectures to be informative and rewarding, some of the talks were thought to have been too technical and were presented at too high a level for the students to comprehend. The hour and a half format for each lecture was felt to be too long. As a result, during the second and third years of the program, the lecture topics were simplified and the lecture duration was shortened to one hour. Students asked for handouts related to the lectures.

Some lecturers were praised for their lucidity and clarity and the stimulating manner with which they lectured. Others were strongly criticized for lack of preparation and boring presentations. Particularly popular each year was a lecture on medical ethics.

Comment

We believe that our summer research training program in biomedical sciences accomplished the goal of introducing selected college students to medical research and helped some of them realistically assess their possible interest in medicine or dentistry. The program succeeded in providing the students with an understanding of selected current concepts in biomedical sciences and an opportunity to participate in an ongoing medical research project. Most students felt they benefited from the program, although a small minority were critical about inadequate supervision by their preceptor.

On the other hand, the amount of time and effort required to process applications and interview prospective candidates was enormous. The financial cost other than personnel time (eg, supplies, chemicals, overhead expenditures, etc) of the total program, although difficult to quantify, was not insignificant. The cost to the medical center of conducting the summer research training program for the three years was approximately $144,000, or $48,000 a year. Included in these costs were the time and effort, either by departmental assignment or on a voluntary basis, of those professionals who served as directors, coordinators, preceptors, and lecturers. There was also the cost of clerical services. In addition, there was the overhead factor that included space, lab and office supplies, chemicals, equipment.

The individuals who worked to develop the program spent approximately eight months each year creating a program format, screening applicants, and assigning selected students in the research laboratories. Furthermore, the time commitment required of preceptors in explaining and supervising the research work was also considerable. We estimate that each preceptor devoted approximately 30 hours during the summer to the student assigned to him or her. In addition, some of the preceptors served as lecturers for the thrice-weekly morning lecture series. Thus, the total impact of the program was probably not sufficient to warrant the medical center's devoting so much of its resources, primarily people and their professional time, to such a program.

There are a number of aspects of this program that require elucidation. Quite obviously, the motivation of the preceptors in working with the summer students is paramount to the success of this exposure. A number of the preceptors acted on a voluntary basis while others were compelled by their superiors to participate in the program. The experience of the preceptors in teaching, as well as their ability to spend sufficient time in their laboratories and with the students, constitutes an additionally significant facet of the success or failure of this program. The various preceptor participants range from senior investigators to very junior individuals. In the long run, it is the amount of effort put forth by the preceptors that ensures the successful exposure of college and medical students to medical research.

There is also a need to emphasize that the length of time for the program exerts a limiting influence. There are very few students in the upper college years or even the first year in a medical school who have sufficient experience with techniques employed in biomedical research to be able to join a research effort upon their arrival in the laboratory. Anywhere from two to six weeks have to be invested in teaching these students the rudiments of technology. Therefore, their actual feeling of accomplishing work is hampered because insufficient time is available to put into practice some of the techniques acquired.

Prior to the institution of this program of formalized summer residencies for these students, the volunteer department of the medical center screened college and medical students on an individual basis for summer volunteer studies in several laboratories. This experience entailed no formal lectures but perhaps closer discussions with preceptors. The length of time in the laboratory was usually three months, and students returned for a second or, in some instances, even a third summer to continue participating in the research effort. It is especially the group that could spend at least two summers in such an effort that proved to benefit the most from this exposure, as attested to by their career choices subsequent to the completion of their formal graduate training.

This individual approach is by far not as costly as the one attempted with the more formal lecture series and greater number of individuals. Also of note is the interest of the preceptor in working with young people and helping them acquire the tools necessary for the performance of the work. This approach is limiting in that the students are exposed to only one individual and must, therefore, forgo the complete experience offered by a course with many different lecturers.

Although our formal program was not continued after the three-year trial period, individual preceptors continue to offer research opportunities in their laboratories to college students during the summer. We believe that brief exposure to a medical research project is a valuable experience and should be offered to selected, highly motivated students. However, the cost in time, effort, and expense to an institution must be weighed against the potential gain for a handful of students.

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THE MULTIVITAMIN/MINERAL FORMULATION

West Indian Patients

Care in United States a challenge

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The authors have been impressed by the fact that West Indian patients may constitute a real problem to the North American health care provider. The West Indians who have migrated to the United States have retained their cultural characteristics; this makes acceptance of modern medicine very difficult for them. The West Indies is a very large geographic area, with significant cultural and linguistic heterogeneity. This article will refer primarily to the black West Indian population as seen in the outpatient clinic at the Kings County Hospital. The clinic receives an average of 549,575 patients per year, based on the past six years data from 1977 to 1982[1]; it has been estimated that about 35% of that population is West Indian. Both authors have been exposed to that particular group of patients, respectively, for five and 12 years.

Due to cultural differences, caring for the West Indian patient in the United States is not simple. All the steps of the classical approach to patient care are hereby reviewed, and, at each stage, attitudinal and behavioral idiosyncrasies typical of the West Indian are unravelled. The knowledge of such characteristics is important; otherwise, arriving at a diagnosis and achieving a therapeutic goal will often be an unusually difficult task.

When everything fails, "go to the doctor." This describes the typical attitude of the West Indian toward medical science in the United States. As submissive, polite, and respectful as they are, a lot of Caribbeans grant little respect to scientific medicine as practiced in America. They generally do not consult physicians; if they do, the visit is expected to be curative. *Hic et nunc!* Just as in a Divine intervention, the answer should be immediate. It is not unusual that a visit to the emergency room the preceding night is followed by a clinic visit the next morning with the chief complaint: "The medicine did not work." The physician is endowed with so much power that confidence is easily lost because the failure rate of an expected spectacular response is very high. "Back home" they visit the physician only during periods of crisis and the treatment is usually spectacular when it works: extracting a bad tooth, incising a huge abscess, draining an ascitic abdomen . . . otherwise, folk remedies are more than sufficient for the less severe illnesses. Moreover, fear of the medical system is an important factor that keeps the patient away from sophisticated medical care, or at least fosters an altered, distrustful attitude.[2] The good old bush remedies do not have side effects; their names do not figure in the long "black list" of drugs that cause cancer or induce birth defects. The mass media have not yet maculated their time-honored renown. In addition to an ever-growing and suspect neopharmacopoeia, new techniques and new devices are being invented, and with them new diseases; "toxic shock syndrome" is as popular on the screen as in medical journals. They have never seen so many cesarean sections. Are they all legitimate? Back home, Mother Nature did not need so much help so frequently. This mental attitude of mistrust, generated for the most part by cultural dissimilarities, without the shadow of a doubt, will alter the steps of patient care dynamics. Many other factors will compound the problem at a given stage, some of which will be discussed.

Peculiarities in history taking

History taking is oftentimes a guessing game. The patient will not volunteer a good part of his history; it becomes the physician's job to search out the information. If some symptoms are admitted to, it is up to the competent physician to simply know the rest. This makes the task even harder for the "second opinion" physician. The average male patient will not acknowledge that he is impotent; in his sexual ability lies a lot of pride. Indeed, fathering a large progeny is the best proof of "macho-ism."

Another problem may be a communication gap between physician and patient due to local colloquialism. Occasionally, language barriers may lead to unfortunate diagnostic mistakes related to misinterpretation of medical terminology,[3] compounded by the difficulty in obtaining a past history. Usually the patient has not been cognizant of his diagnosis or of the nature of surgical procedures performed in the past. In some instances, the only clue may be a surgical scar. Record keeping is poor — when it comes to family history, it is not unusual to confront either silence or a decided negativism. Nobody is going to reveal the shameful diseases of the family: tuberculosis, cancer, psychiatric disorders, epilepsy, etc. Finally, the socioeconomic history is frequently incorrect; many are illegal aliens and their addresses and even their names may not be accurate.[4] Their nomadic tendency is partly explained by a constant change in domicile, frequently looking for better and more quiet places to live. Because of all this reticence, retrieval of charts for continuity of treatment is difficult.

Physical examination: A nut to crack

Undergoing a complete physical examination is often a trial for many West Indian patients, particularly the elderly, more conservative women. They dislike getting undressed, even when properly attired in an examining room. Breast examination is often refused either because of prudery or fear of discovering a serious or incurable disease. Many believe that a pelvic examination is necessary only during pregnancy, and only at the time of delivery. Very few accept the idea of a "pap smear" at the first suggestion, and the argument may occasionally be that they are not sexually active.

Another important point is what one may call "the myth of the stethoscope." The instrument is not conceived as a sound amplifier but rather as a detector of a cause of illness. Therefore, a physical examination is not complete if the stethoscope is not applied to an aching joint or a sore buttock, or to a leg or a neck. Perhaps it should be, for many of us complain that the art of auscultation is dying. One physican I know recalls that Prof. Emmanuel Libman (Libman-Sachs endocarditis) used to inch over the patients' buttocks with his stethoscope in search of vascular bruits to confirm the diagnosis of endocarditis. Finally, when it comes to physical examination, an occasional patient may go to the extreme; he gets completely undressed and expects a detailed examination even if the visit is for a minor ailment.

Laboratory work-up: necessity or physician's fancy

This important step in patient care represents a matter of skepticism for many West Indian patients. It is difficult for them to understand why so many blood specimens are needed. Is the blood used for some kind of lucrative business? Is this act of vampirism necessary or is it merely a question of experimentation? Indeed, in their circle, the idea is prevalent that scientists use clinic patients, without their knowledge, for research purposes. Another cause of fear is the firm belief that blood drawing, particularly in the fasting state, leads to debility and anemia.

The examination of body excreta (sputum, urine, feces) may meet a lot of resistance from some patients. One nurse explains: "They are like cats; for them stools constitute a personal thing, and body wastes should be covered or disposed of right away, since leaving it to another person is equivalent to an insult." This feline attitude not only stems from prudery but also expresses a certain belief in obeah (witchcraft) practices. It is well known that these elements are used in demonic cults of which obeah is the most prevalent in the Islands.

The clinical methods used to test for glycosuria are easy to handle, using glucose enzymatic test strips (Clinitest, Tes-Tape). Much easier, however, are the traditional and folkloric ways. "Back home," a very fast and accurate method is to urinate "in the yard" and observe what one might call the "positive glycotropism" of ants. In the United States not infrequently, the Caribbean patient would prefer to verify the amount of sugar in the urine by tasting instead of testing it.

The fear of radiation is found in any cultural groups. What is typical to some West Indian patients is that such fear is extended to electroencephalograms, electrocardiograms, echocardiograms, etc., all considered as special forms of radiographic examination. Therefore, physicians need to explain that no radiation is involved in these procedures. Another misconception is that roentgenographic examinations possess a curative potential. A middle-aged female patient said: "I took so many x-rays for this stomach ache and it is still there."

Diet

The two most common items that are restricted in a therapeutic diet are sugar and salt. Ironically, these are two gastronomic ingredients most appreciated by the Islanders, and there is a valid cultural reason for it.

Sugar cane is an important product of the Islands and the people have learned to use it in all forms, and abundantly. Sugar is used to edulcorate everything: juice, milk, coffee, etc. In addition, it is about the only means of conserving fruits, as well as certain other products. Home-made fruit jam and jelly are very popular, and there is no extensive system of refrigeration. In some areas, the scarcity of other essential foodstuffs has swung the pendulum toward the more available forms of energy — sugar and starch. This in turn has created some kind of taste perversion or taste dependence difficult to get rid of; it may even be the phenomenon of "autoaddiction" as proposed by McCloy and McCloy.[5]

A similar situation is observed with salt. As with sugar, salt is considered an important preservative; it is used to conserve animal products such as beef, pork, goat, fish, etc. Salt intake is higher in the West Indies than in European countries and North America. This truism needs no proof. Suffice it to compare two recipe books from those two distinctive geographic areas. There may be a teleologic rationale for the adherence to a high-salt diet. The hot climate and the constant profuse diaphoresis probably dictate this culinary habit. A valuable analogy is found in the salt craving of Addison's disease where there is an excessive saluresis and an exaggerated sodium loss in the sweat. Given all this, one can appreciate why salt and sugar restriction in prescribed diets meets a high rate of noncompliance.

Caloric restriction for weight reduction or to control diabetes might upset a deeply rooted cultural preference, since losing weight might violate the canons of beauty of some West Indians. Indeed, for them, particularly those not exposed to intercontinental cultural exchange, the fatter the better. In other words, steatopygia is the equivalent of callipygia.

Finally, a lot of problems with diet may come from a lack of awareness. It is not unusual to see a diabetic patient substituting honey for sugar, a lot of corn instead of a lot of rice, or a patient on a low-salt, low-cholesterol diet using very little pork but a lot of ham.

Noncompliance to medication

"Is this medicine any good, nurse?" Following an affirmative answer often comes this retort: "For, you know, I take herbs three times a day." Many of the physicians who have developed honest and sincere bonds with their patients will be unanimous in saying that the patients take their medication reluctantly and often not at all as prescribed. In many cases, for example, antihypertensive medication has been progressively increased to the quadruple of the initial dose without effect; the truth is that the drug has never been taken, or, if so, then only sporadically and in a lesser dose. This pseudo-mithridatism is very common with antihypertensives but may also be observed during the treatment of diabetes and other chronic conditions. One reason is that compliance to medication is strongly subject to symptomatic guidance: no symptoms, no remedies. Another reason is the tendency to adhere to a half-and-half type of regimen, that is, to alternate between bush tea and pharmaceutic products.

It is important to mention certain beliefs that may interfere with scientific treatment. In some areas of the West Indies, a purge is considered a panacea and is used for conditions as diverse as abdominal pain, fever, pulmonary congestion, headaches, etc. According to many West Indians, the most effective way to administer medications is in the injectable form. A visit to a physician is a failure if the patient is not gratified by a "shot;" this "myth of injectables" applies particularly to penicillin and vitamins. Finally, religious conviction may explain the patient's adherence to faith healing and rejection of prescribed drugs.

Summary

Certain aspects of the West Indian culture, which come to light through physician-patient interaction, have been reported. Noteworthy are the voluntary concealment of some part of medical history, particular ideas about physical examination, the culture-specific way of dealing with laboratory investigations and diet, and, last, the adherence to a *sui generis* therapeutic regimen combining both primitive "medicine" and scientific recommendations. If there is a molding of human diseases by time,[6] geographic distances may have a comparable impact, at least on the attitude toward illnesses. These observations, although not exhaustive, constitute important information for the practitioner caring for the Caribbean patient in the United States.

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Electrocardiograms of the Month

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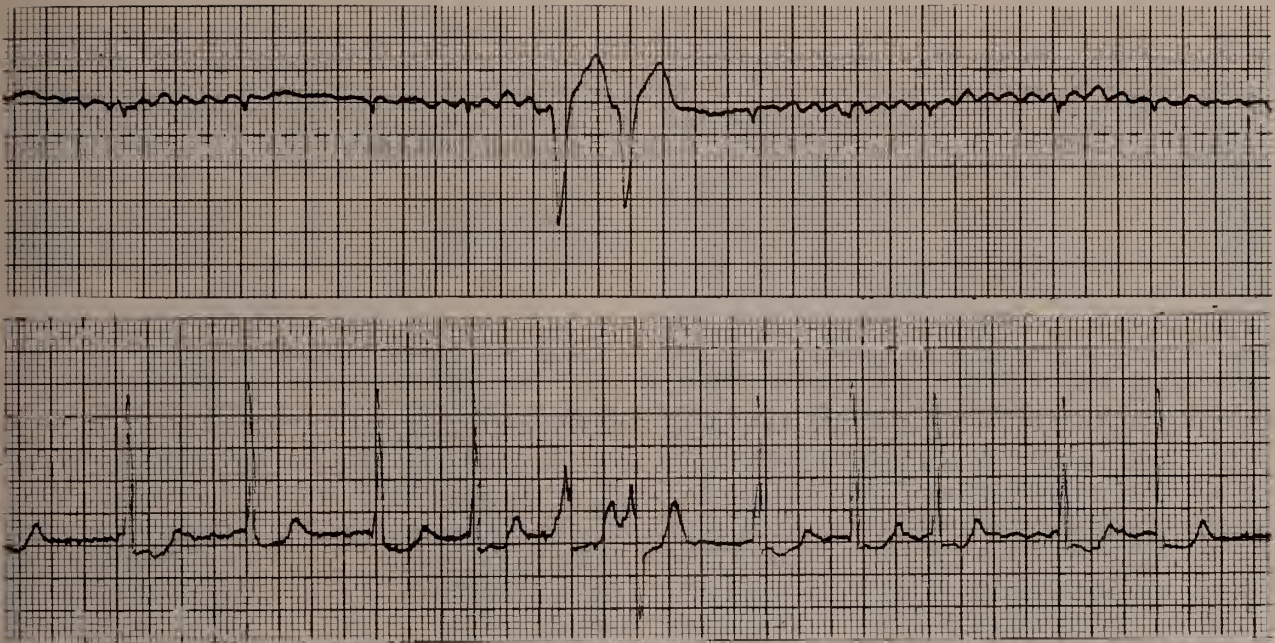
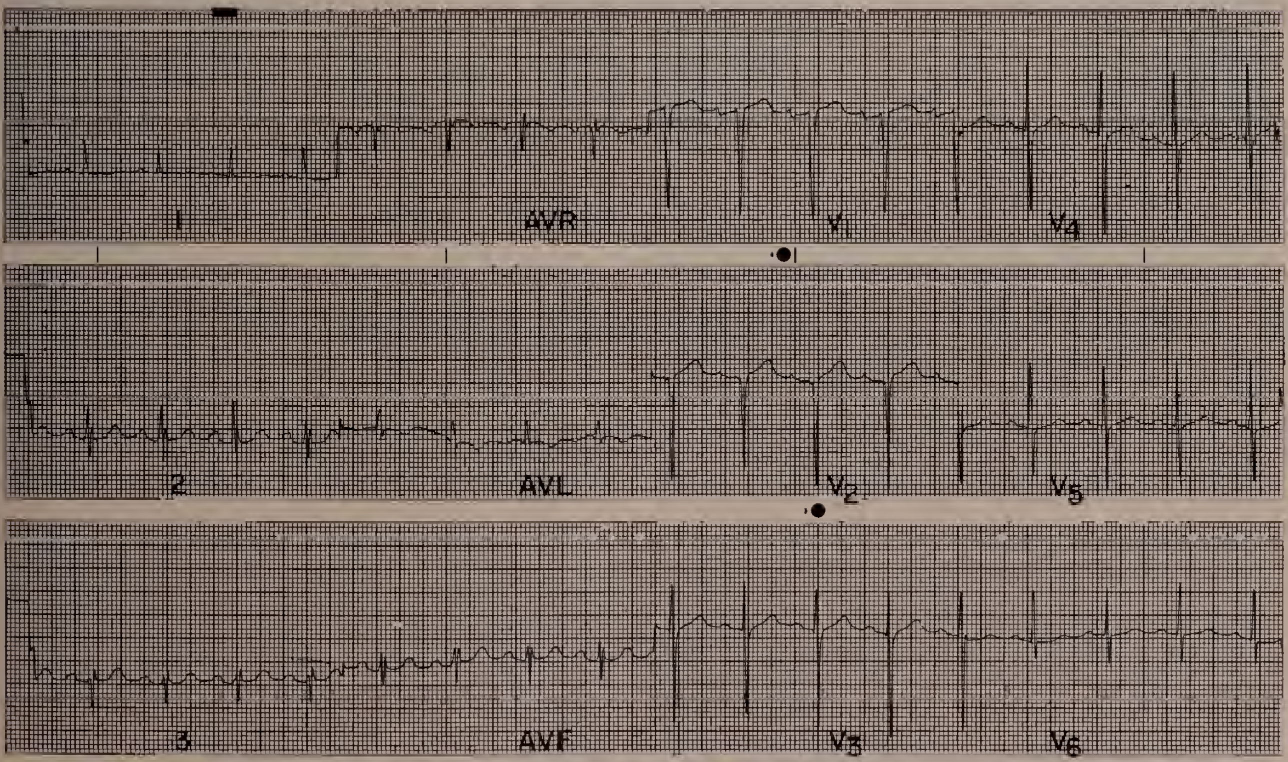


QUESTION 355. An 86-year-old man entered the hospital because of recurrent syncope. He had been in atrial fibrillation for many years and was receiving digoxin. Physical examination revealed no obvious cause of symptoms. A Holter monitor recording was obtained. The electrocardiogram is a simultaneous two-lead strip from that recording. What is the interpretation?



QUESTION 356. The patient was a 71-year-old woman with recent onset of asthma. What is the interpretation of the electrocardiogram?

Electro-
cardiograms
of the Month

ELUCIDATION

Answer 355. The top strip reveals atrial fibrillation. A pair of ventricular beats is present in the middle of the strip. Definite QRS complexes are not seen in the remainder of the tracing. The small sharp downward waves may be due to ventricular depolarization but no repolarization (ST or T) waves are visible.

The bottom strip shows irregular QRS complexes followed by T waves. The diagnosis is atrial fibrillation with a ventricular rate of approximately 90/min. There is a couplet of ventricular premature depolarizations.

If the top lead only had been available, an erroneous interpretation might have been made. Two leads in different planes should be obtained during ambulatory monitoring because the QRS may be almost isoelectric in any single lead.

Answer 356. The rhythm is regular sinus at a rate of 77/min. The P waves are notched in most leads suggesting an atrial abnormality.

The T wave is flat in lead I and negative in aV_L. The T wave in lead III is taller than in lead I. The mean electrical axis of the QRS in the frontal plane is 0°. The mean electrical axis of the T wave is +90°. The mean electrical axis of the QRS and T waves are usually less than 60° apart. The T wave changes in the frontal plane are abnormal, though nonspecific.

There is an rS pattern in V_1, a QS in V_2, and small q in V_3—V_6. The T waves are normal in the precordial leads. The QRS changes in V_2 are compatible with an anteroseptal infarct of indeterminate age. Had there been a QS in V_1, then the QS in V_2 might be normal.

Radiologic Problem of the Month

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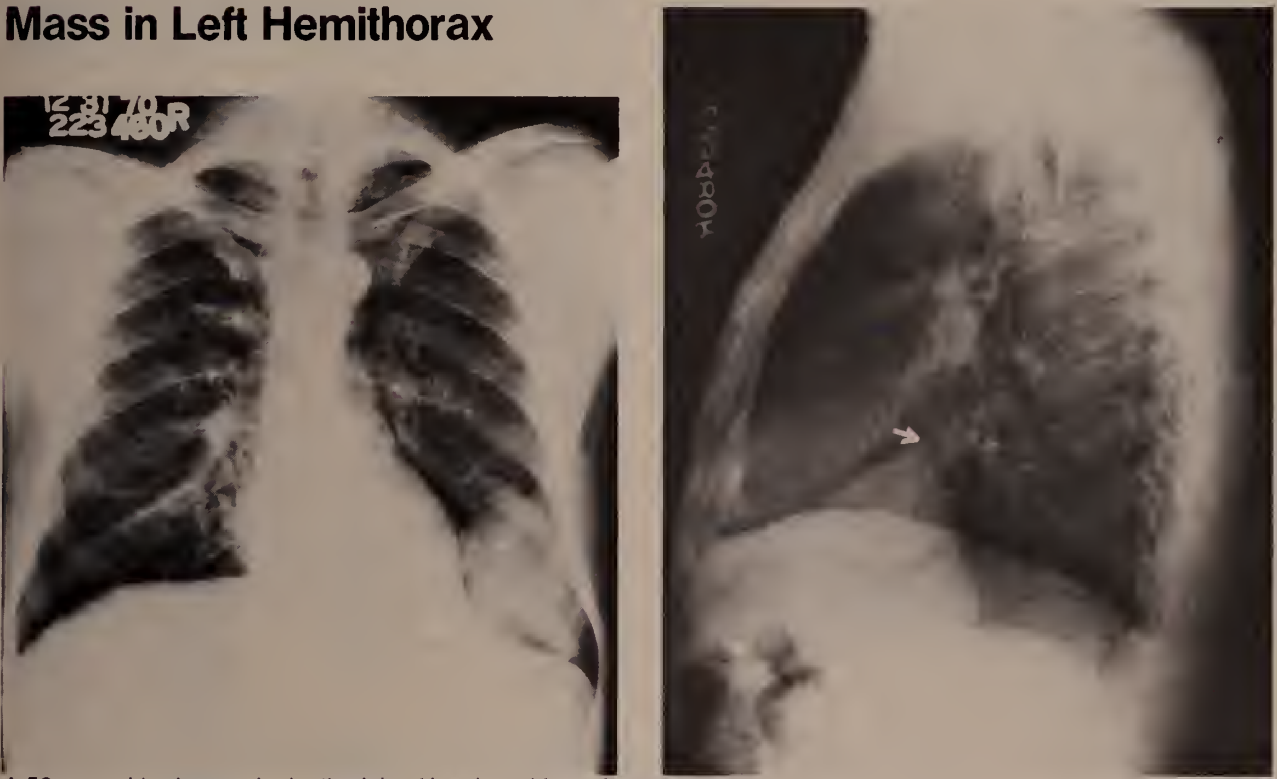
Mass in Left Hemithorax



A 52-year-old salesman had arthralgia of hands and feet of recent onset. Routine work-up included roentgenograms of the chest.

Elucidation

The posteroanterior view of the chest (Fig, left) reveals the cardiovascular silhouette to be normal. An oval opacity is noted in the lower zone of the left lung and this opacity does not silhouette with the left dome of the diaphragm and is partly retrocardiac. In the lateral view of the chest (Fig, right) this density is well defined with smooth borders and has a pointed margin in its superior aspect (arrow), localizing the mass in the major fissure. The nonsegmental nature of this lesion, the smooth borders, and the superior beak all indicate the interfissural location of the mass arising from the pleura. With the major clinical symptom of arthralgia, the radiologic presentation of this mass should give a clue to the diagnosis of localized fibrous mesothelioma. The arthralgia is obviously due to hypertrophic osteoarthropathy. Indeed, the roentgenographs of the hands and feet showed linear periosteal reaction along the metacarpals, metatarsals, and phalanges, confirming the diagnosis of hypertrophic osteoarthropathy.

Ninety-five percent of pleural neoplasms are metastatic in nature.[1] Out of 5% primary pleural neoplasms, mesotheliomas constitute the bulk. Mesothelioma is a tumor arising from the flat cells lining the surfaces of all true serous membranes, *viz*, pleura, pericardium, and peritoneum. Histologically, mesotheliomas of the pleura consist of three categories: fibrous, papillary and tubular (epithelial), and mixed.[2] Distinction between benign and malignant forms is often not possible even histologically. However, on radiologic grounds, two major forms exist, the localized fibrous mesothelioma and the diffuse mesothelioma. A great number of the localized fibrous mesotheliomas are benign while all diffuse mesotheliomas are malignant. Localized fibrous mesothelioma is a slow-growing, well-circumscribed, or lobulated tumor, that often takes its origin from the visceral pleura.[1–3] Unlike the diffuse variety, localized fibrous mesothelioma is not known to be associated with asbestos exposure.

Clinically, this rare tumor is encountered in the fourth through sixth decades but has been observed in patients of ages 23 to 83.[3] No sex predilection is known. When the mass grows to be large, local invasion occurs thus producing pain in the chest or rib cage. About 10% to 15% of the patients may have peripheral arthralgia due to hypertrophic osteoarthropathy. Hypoglycemia may be present in few instances.

Radiologically, localized fibrous mesothelioma appears as a solitary, smooth, or lobulated mass along the pleural margin at the periphery or in the interfissural area. It varies in size from a small coin to one occupying the entire hemithorax. Often, the mass is pedunculated. Calcification is very rare and pleural effusion may be encountered occasionally. The location of the mass is often helpful in suggesting the diagnosis radiologically. Most of these lesions are encountered in the lower half of the chest, predominantly on the lateral, diaphragmatic, or interfissural pleural surfaces. Routine tomographic and computerized tomography may help to outline the lesion to a greater advantage and also to rule out the presence of multiple masses. Calcification and fat content are easily detected by computerized tomographic technique.

In the differential diagnosis of this lesion, which is localized in the fissure, several entities have to be considered. One common lesion that is often observed in the fissural area is loculated pleural effusion. Pseudotumor of congestive heart failure is often located in the minor and major fissures. This patient does not have any cardiac disease nor did he have any signs of infection to consider loculated empyema. Occasionally, a fibrin ball may be found in the pleural cavity as a result of long-standing hydropneumothorax. An ecchinococcal cyst may be located in the fissural area. From the history of this patient, all the above possibilities can be ruled out. Metastasis, lymphoma, and primary malignant mesothelioma can appear as a solitary lesion initially. Benign neoplasms such as lipoma and hamartoma may also be considered. However, associated hypertrophic osteoarthropathy strongly suggested the diagnosis of localized fibrous mesothelioma.

This patient underwent thoracotomy and the resected mass proved histologically to be benign fibrous mesothelioma.

Diagnosis

Localized, benign fibrous mesothelioma of the pleura

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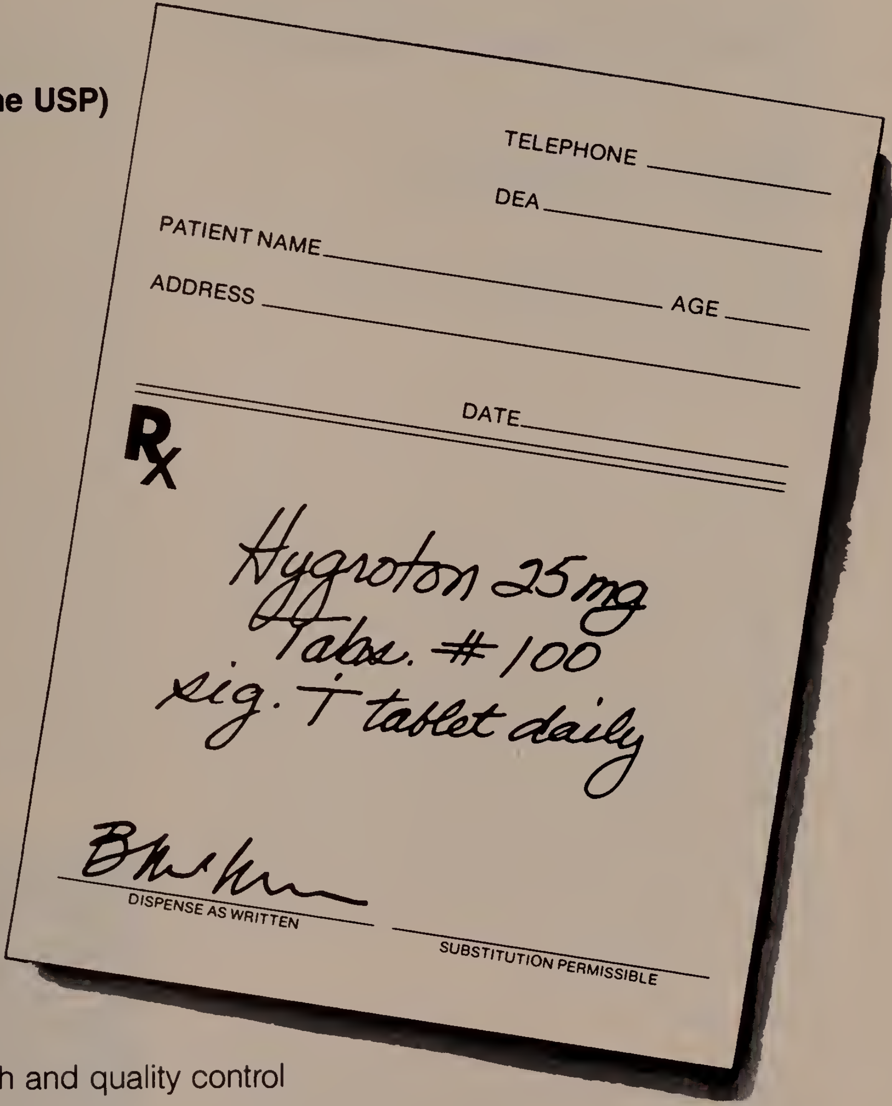
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Indications: Hypertension, adjunctive therapy in edema.

Contraindications: Anuria, hypersensitivity to chlorthalidone or other sulfonamide-derived drugs.

Warnings: Should be used with caution in severe renal disease, impaired hepatic function or progressive liver disease. May add to or potentiate the action of other antihypertensive drugs. Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma. There is a possibility of exacerbation or activation of systemic lupus erythematosus with thiazides, which are related to chlorthalidone. This has not been reported with chlorthalidone. Thiazides cross the placental barrier and appear in cord blood. Use in pregnant women requires that the anticipated benefits of the drug be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. In nursing mothers, thiazides cross the placental barrier and appear in breast milk. If use of the drug is essential, the patient should stop nursing.

Precautions: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals. All patients receiving chlorthalidone should be observed for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Hypokalemia may develop with chlorthalidone as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH. Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity. Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather. Hyperuricemia may occur or gout be precipitated in certain patients. Insulin requirements in diabetic patients may be increased, decreased, or unchanged and latent diabetes mellitus may become manifest. Chlorthalidone and related drugs may increase the responsiveness to tubocurarine. The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient. Chlorthalidone and related drugs may decrease arterial responsiveness to norepinephrine. If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy. Chlorthalidone and related drugs may decrease serum PBI levels without signs of thyroid disturbance.

Adverse Reactions: Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis; dizziness, vertigo, paresthesias, headache, xanthopsia; leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia; purpura, photosensitivity, rash, urticaria, necrotizing angiitis (vasculitis) (cutaneous vasculitis), Lyell's syndrome (toxic epidermal necrolysis). Orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates or narcotics. Other adverse reactions include hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness, impotence. Whenever adverse reactions are moderate or severe, chlorthalidone dosage should be reduced or therapy withdrawn.

Usual Dose: One tablet daily.

How Supplied: Tablets—100 mg. (white, scored), 50 mg. (aqua) in bottles of 100, 1000 and 5000; 25 mg. (peach) in bottles of 100 and 1000; unit-dose blister packs, boxes of 100 (10 x 10 strips).

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Oropharyngeal Tularemia

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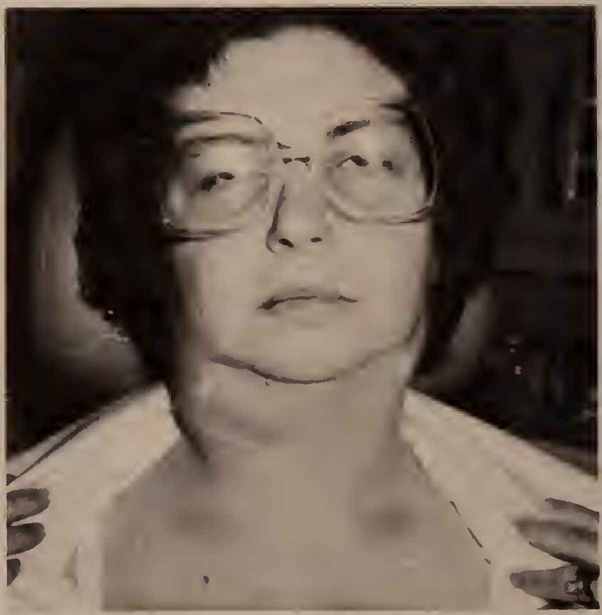
Tularemia is an infectious disease caused by the gram-negative coccobacillus, *Francisella* (*Pasteurella*) *tularensis*. The organism was discovered while looking for bubonic plague in Tulare County, California, following the San Francisco earthquake and fire of 1906.[1] Tularemia has been reported in most parts of the United States and in many foreign countries. However, because it is uncommon, it is often unrecognized in the initial stages of infection. When diagnosis and appropriate treatment are delayed, convalescence may be prolonged and morbidity and mortality increased. This case report and discussion will alert the reader to the possibility of tularemia in the patient with exudative tonsillitis and pharyngitis with cervical lymphadenopathy. Almost 2% to 4% of tularemia cases are symptomatic of oropharyngeal tularemia.[2]

Case report

A 38-year-old woman was admitted to Southampton Hospital with a nine-day history of an increasingly severe throat, headache, weakness, nausea, and lightheadness; she had great difficulty swallowing. The patient lived on a farm and worked as a secretary. Her dog had recently been ill, losing strength in his legs. She had had no recent contact with wild animals. Examination revealed an acutely ill, mildly dehydrated white woman. Her vital signs were as follows: BP 148/80, temperature 102 °F orally, pulse 170/min, respiration 18/min. She had markedly reddened and swollen tonsils covered by thick grey exudate, which extended onto the lateral pharyngeal walls. There was marked enlargement of cervical digastric and deep jugular lymph nodes bilaterally, which were firm, tender, slightly movable, and largest in the middle deep jugular region. There, they were matted together and up to 7 cm in diameter. There was no hepatomegaly or splenomegaly.

Pertinent laboratory tests on admission revealed 8,400 μL WBC count, 68% polymorphonuclear leukocytes, 23% lymphocytes, 77% monocytes, 2% atypical lymphocytes, and 10.4 g/dL hemoglobin. Throat cultures revealed normal flora, several colonies of coagulase-positive staphylococcus, and no deep fungi. Gram-stained throat smear and cytologic tests were unrevealing. Treatment with ampicillin, 500 mg orally (PO) every six hours, led to no improvement after four days. She developed a rash and was started on erythromycin, 250 mg PO every six hours. Serum agglutinins to brucella and salmonella were absent and serologic test findings were negative. Monocyte spot test and Epstein-Barr titer findings were also negative, as were findings for purified protein derivative. Her agglutinins for *F tularensis* were 1:40 three days after admission and 1:640 seven days after admission. Thirteen days after admission and two days after discharge, the patient had a tularemia agglutination of 1:2,000. The diagnosis of tularemia was made and she was treated with tetracycline, 250 mg PO every six hours, and streptomycin, 500 mg intramuscularly (IM) every 12 hours, after the second titer was reported.

She was readmitted two months after her first



Patient prior to drainage of bilateral cervical collections. Over 100 ml of thick fluid was drained from within necrotic lymph nodes. Biopsy specimens revealed granulation tissue. Cultures showed no growth.

admission when large abscesses, as seen in the Figure, were drained from her necrotic cervical lymph nodes bilaterally. Routine aerobic, anaerobic, fungal, and acid-fast bacillus cultures were negative, and biopsy specimens revealed granulation tissue. *F tularensis* agglutinins were over 1:2,560. Medications consisted of chloramphenicol, 500 mg PO every six hours, and gentamicin, 80 mg IM every eight hours. The wounds stopped draining in two weeks and healed after two months when the patient returned to work. The lymphadenopathy resolved over the next six months.

Comment

Microbiology. *F tularensis* is a gram-negative bacillus related antigenically to *Yersina* (*Pasteurella*) *pestis* and *Brucella* sp which does not grow on media used for routine aerobic and anaerobic cultures. It can be isolated from specimens taken from mucosal or cutaneous lesions, enlarged regional lymph nodes, and sputum. It can be grown in dextrose and cysteine or thioglycolate blood agar. Cultures for tularemia are generally not recommended because of the danger to laboratory personnel. Diagnosis is made by demonstrating a rise in titers of serum agglutination for *F tularensis*. The agglutination titers become positive after two weeks of illness.

Clinical manifestations. The incubation period is from three to seven days. The presenting signs and symptoms depend on the site of entry and the host response. Several forms of tularemia are generally described according to the presentation. The ulceroglandular form occurs following entry of the organism through skin or mucus membrane. It appears as an ulcer at the site of entry, regional lymphadenopathy, and systemic toxicity and frequently occurs in hunters, butchers, housewives, and others who handle wild animals and carcasses. Lymph node enlargement without a detectable portal of entry is called glandular tularemia. Typhoidal tularemia has constitutional symptoms and signs without evident site of entry or lymphadenitis. Oculoglandular tularemia results from entry of the organism through the conjunctiva. Gastrointestinal tularemia appears as diarrhea, abdominal pain, and other gastrointestinal symptoms.

Oropharyngeal manifestations of tularemia with cervical lymphadenopathy and systemic toxicity occurred in our patient, and was initially diagnosed, presumptively, as streptococcal pharyngitis and tonsillitis. Gram-stained smear and culture were unrevealing, the monocyte spot test was negative, and the patient did not respond to ampicillin. A rash was interpreted as a penicillin allergy, but may have been a tularemia rash which is occasionally seen. Serum agglutination to *F tularensis* was weakly positive three days after admission (12 days from the onset of symptoms) and very strongly positive one week later. Signs and symptoms of systemic toxicity responded to streptomycin and tetracycline. The patient was readmitted one month later for drainage of bilateral, abscessed cervical lymph nodes, and over the next four months made an uncomplicated and complete recovery. The source of infection in this patient has not been identified; it may have been her dog, which was known to sniff carcasses of wild animals and was ill prior to the patient's illness. Measurement of serum agglutination titers to *F tularensis* in pets of adults and children with tularemia would be very informative, especially when prior contact with a wild animal host or insect vector cannot be found.

Summary

Tularemia, an infectious disease caused by the gram-negative coccobacillus, *Francisella* (*Pasteurella*) *tularensis*, has been recognized in all parts of the United States and in most foreign countries. It is endemic in eastern Long Island, where a large reservoir exists in wild animals, particularly squirrels and rabbits. Oropharyngeal tularemia is an unusual manifestation of tularemia occurring in 2% to 4% of cases. A case report of oropharyngeal tularemia is presented. It will alert the reader to the possibility of tularemia in the patient with exudative tonsillitis, pharyngitis, and cervical lymphadenopathy.

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The Return of the Perilous Prune Pit

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Since Zelman[1] recounted his personal experiences with "the perilous prune pit" 20 years ago, rare sporadic instances have been reported of ileus or obstruction due to fruit pits. We report our experiences with such a case.

Case report

This 16-year-old black male developed periumbilical cramping pain six months prior to admission to Metropolitan Hospital. The pain lasted from a few hours to a whole day and was increased by ingesting large meals. Two months prior to admission he was seen at another hospital because of the added symptom of weight loss. Laboratory work-up was negative; symptoms were attributed to "viral gastroenteritis" and he was advised to adhere to a liquid diet. He returned one week later (September 29, 1981) as the pain had moved to the right lower quadrant (RLQ) and was accompanied by occasional vomiting and diarrhea. There was no melena or hematemesis. He was transferred to Metropolitan Hospital with a diagnosis of acute appendicitis.

On physical examination he was well developed, dehydrated, temperature was 99.4 F, pulse 88/min, white blood cell count was 9,300 with a normal differential. Positive physical findings were limited to the abdomen: bowel sounds were present; there was guarding and tenderness in the RLQ with rebound tenderness. Flat plate radiograph of the abdomen was negative. He was operated on September 30, 1981 and, with a gross diagnosis of regional enteritis, a segmental resection of the right colon and 15 cm of terminal ileum with end-to-end anastamosis was accomplished.

Gross description. The specimen consisted of an intact segment of ileum, cecum, and appendix, measuring 45 cm in length, and varying in diameter from 5 cm at the ileal line of excision, to 2 cm at the distal ileum, and 7 cm at the cecum. The serosal surface was smooth and glistening except for the distal 10 cm of the ileum where it was dull and focally hemorrhagic.

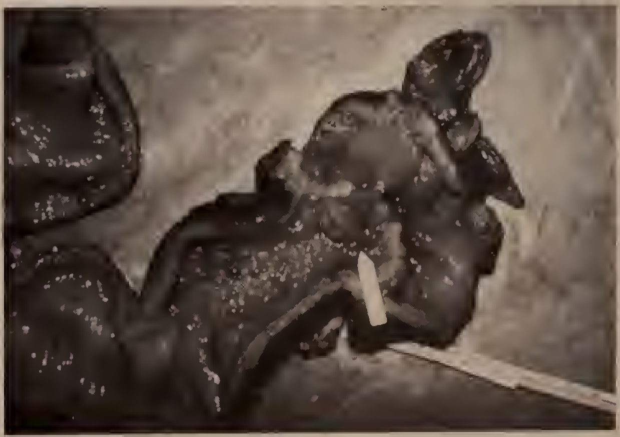
The specimen was opened at the antimesenteric border and was filled with approximately 50 mL of thick hemorrhagic fluid. An ovoid, biterminally pointed, brownish prune pit measuring 2.5 × 1.3 × 0.7 cm was found lodged transversely in the terminal ileum in the region of the ileocecal valve (Fig). The ileal wall was markedly thickened in the distal 10 cm and measured 1.4 cm in thickness, whereas the wall of the rest of the ileum measured 0.5 cm and that of the cecum 0.4 cm. The mucosa of the ileum was moderately edematous, and in the distal 10 cm the mucosa was pale, coarsely granular, ulcerated, and focally hemorrhagic. The cecal mucosa was mildly congested but otherwise unremarkable. The appendix measured 6.5 cm in length and 0.5 cm in diameter and appeared grossly unremarkable.

Comment

Price et al[2] reported three cases of fruit pits completing obstruction initiated by carcinoma of the colon and cecum and one pit lodging astride Crohn's disease of the terminal ileum. Melhem et al[3] described the "silhouette sign" and pointed out that gastrointestinal radiopaque calculi of long standing can be defined clearly by calcium deposited about their perimeter but are obscured by contrast medium.

Weaver and Trapnell[4] described three cases: one of postoperative adhesions, one of Crohn's disease, and one of an ileal polyp that became obstructed by fruit stones. Their three cases all had positive "silhouette signs." The absence of the silhouette sign, as in this case, does not, however, exclude fruit stones as a causative agent of obstruction, ileus, or pain.

Although a prior stenosing lesion enhances the probability of a fruit pit lodging in the gastrointestinal tract, lodging of such stones in a normal duodenum or small intestine has also been reported. As



Prune pit lodged transversely just proximal to ileocecal valve in a case of regional enteritis.

a matter of fact Faircloth and Robison[5] report a large-intestinal obstruction due to grapes and grape pits. It thus behooves us to include in a careful gastrointestinal history the question of even remote inadvertent fruit pit ingestion as the cause of intermittent cramps.

Summary

A case is presented of fruit pit obstruction in a patient with previously undiagnosed Crohn's disease admitted and operated on for presumed appendicitis. Awareness of this entity should lead to careful history of prior fruit pit ingestion and attempt to diagnose said culprit.

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Acknowledgments. We thank H.Z. Rotterdam, M.D. and S. C. Sommers, M.D. for their kind consultation, Mr. Egbert Carpenter who provided photography, and Mrs. T. Eversley who provided secretarial services.

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Takayasu's Arteritis

Asymptomatic presentation in a two-year-old boy

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The measurement of blood pressure in preschool children is infrequently performed. Often blood pressure is only determined in situations where symptoms or signs implicate hypertension as a cause or consequence of a given disease state. We recently encountered severe hypertension in an essentially asymptomatic two-year-old boy detected on routine nursery school physical examination. Diagnostic evaluation yielded the finding of Takayasu's arteritis involving the aorta, renal and mesenteric arteries, as well as the aortic arch. This case is unique because of the age of the patient and lack of symptoms despite extensive arteriographic findings.

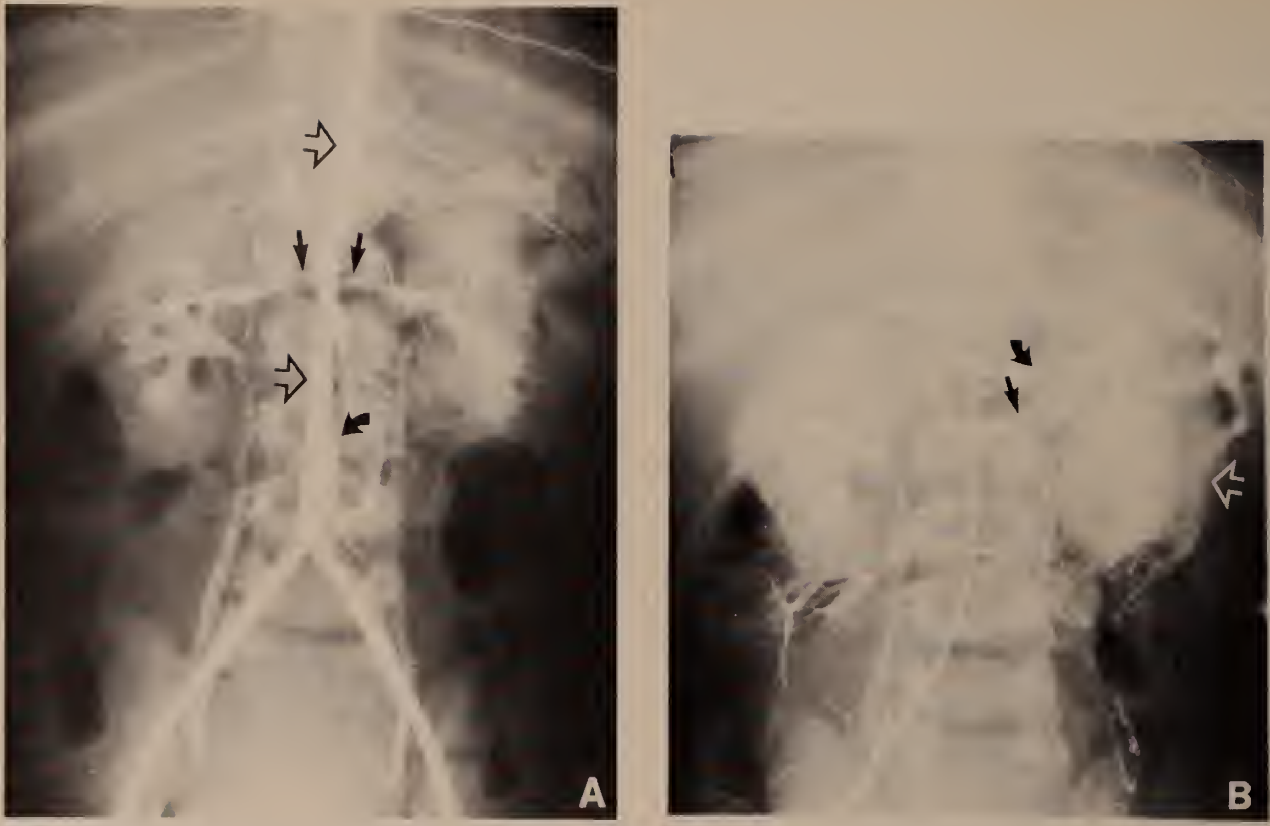
Case report

This 2½-year-old white boy was considered to be in good health with normal growth until a blood pressure of 130/90 was recorded by his physician on a routine examination. This was confirmed on a second examination several days later. There were no other abnormalities noted. He was referred to the Hospital of the Albert Einstein College of Medicine for diagnostic evaluation and treatment.

On physical examination the blood pressures were: left arm - 152/80; right arm - 180/76; left leg - 152/80; right leg - 152/82. The examination was significant for systolic bruits over the temporal, carotid, brachial, femoral, and renal arteries. There were no cardiac murmurs, abdominal organomegaly or masses and all pulses were equal in quality and peak intensity. Fundoscopic examination revealed no evidence of hypertensive or ischemic changes.

The laboratory evaluation included a normal hemogram, electrolytes, and renal function (serum creatinine - 0.5 mg/100 mL). EKG showed left ventricular hypertrophy. Radiologic and radionuclide studies revealed: (1) chest x-ray: cardiomegaly due to left ventricular enlargement; (2) intravenous pyelogram (IVP): right kidney approximately 1.5 cm smaller than the left; (3) renal scan: small right kidney and impaired blood flow bilaterally; and (4) abdominal aortography: see figure. The plasma renin activity was greater than 20 ng/mL/hr from both renal veins as well as in the inferior vena cava above and below the renal veins. In contrast to many cases in the literature, the results of tuberculin skin test with PPD were negative and the ESR was only 25 mm/hr.

Leonard G. Feld, M.D., Ph.D., is supported by a fellowship grant from the Kidney Disease Institute of New York State.



(A) Anteroposterior aortogram. Note narrowing of abdominal aorta from T-12 to L-3 (open arrow heads), bilateral renal artery stenosis (black arrows), nonfilling of the hepatic artery on the early films, slow filling of the superior mesenteric artery, and very large inferior mesenteric artery (curved black arrow). (B) Late phase of AP aortogram shows retrograde filling of middle colic artery via collaterals from arch of Riolan (white open arrowhead). Note well-developed collateral from arch to hepatic artery (curved black arrow). Hepatic artery fills late and in a retrograde fashion. These findings, confirmed on lateral aortogram, are consistent with stenosis of origin of hepatic artery and proximal superior mesenteric artery including take-off of middle colic artery.

Over the subsequent twelve months, the patient has been normotensive with treatment (captopril 50 mg four times daily). Renal function has deteriorated (serum creatinine, 0.9 mg/100 mL), ESR has increased to 65 mm/hr and over the last month of observation, brachial and femoral pulses have diminished in quality and peak intensity, and there has been no linear growth.

Comment

In 1908, Takayasu[1] and Onishi[2] described a syndrome characterized by a visual disturbance and the absence of upper extremity pulses (radial). The symptomatology is variable and is dependent on the vessel(s) involved. The disease affects primarily the large elastic conducting arteries including the pulmonary arteries.[3] The clinical features can be categorized in the following fashion: (1) involvement of the aortic arch: ophthalmologic signs, bruits over the temporal and carotid arteries resulting in neurologic findings of dizziness, headache, syncope, or hemiparesis and occasionally convulsions; (2) involvement of the descending aorta and its branches: systolic murmur audible in the lower thoracic or upper abdominal region, absence of femoral pulses, upper limb hypertension, abdominal symptoms and renovascular hypertension.[4–6] Although Lande and Rossi[7] and others[8–10] report occlusion or stenosis of the celiac and/or superior mesenteric arteries, gastrointestinal symptoms are rare due to the collateral circulation of the intestinal vasculature. In contrast, renovascular hypertension develops because the renal artery is an end-artery with the limited availability of collateral vessels to prevent renal ischemia.[11]

The disease is most commonly detected during the second through fourth decades, with a peak between 15 and 25 years of age,[12] but it is not rare in childhood in some countries.[5,6,13] In addition, it tends to occur more commonly in females.[8] The patient generally comes to medical attention due to symptoms relating to the hypertension.[8,14,15] In Ishikawa's study[16] of 54 patients, he postulated four reasons for the delay from onset to establishment of a diagnosis: (1) failure to detect bruits over the affected vessels; (2) failure to detect a change in quality or intensity of pulses and an elevated ESR; (3) emphasis placed on related symptoms rather than on their vascular etiology; and (4) mild complaints without limitation of physical activity.

Nasu[17] and others[10,18,19] conducted an extensive study of the pathologic lesions in Takayasu's arteritis. The vessels involved included the aortic arch, pulmonary, subclavian, carotid arteries, the abdominal aorta and its branches. The initial lesion is a periarteritis with the thickening of the adventitia and infiltration of lymphocytes and plasma cells. The media shows disruption of the elastic lamellae with localized dilatation of the wall. There is also increased vascularization with round cell infiltration and occasional giant cells. The inflammatory process affects all the layers of the artery. The obstruction to the blood supply of the media may cause severe hyperplasia of the intima with significant reduction in the size of the vascular lumen. The arterial lumen is also reduced due to fibrosis, often resulting in thrombosis.

From a pathophysiologic standpoint, involvement of the abdominal aorta and proximal segments of the renal arteries creates a human analog of the Goldblatt kidney model with renin-mediated hypertension.[9,11,20,21] In addition, both renal arteries tend to be involved if arteritis occurs in the contiguous portion of the aorta. Due to the extensive nature of the vascular lesions and friable weakened vessel valls which do not readily lend themselves to anastomosis, surgical correction may yield poor results.

The extensive nature of our patient's disease is apparent from the carotid and temporal bruits indicative of cerebrovascular involvement as well as cardiomegaly and arteriographic changes in his renal, superior mesenteric, celiac arteries and abdominal aorta. Despite anatomically severe disease, he was not clinically ill, although in retrospect, we were able to elicit a history of occasional headaches, vomiting, and questionable seizures which may have been due to hypertension. Baroreceptor dysfunction (due to involvement in the inflammatory process) has been described in "aortitis," [21] resulting in paroxsymal hypertension, which may delay the establishment of a correct diagnosis. Other factors leading to hypertension in this disease are the coarctation effect, loss of vascular elasticity/compliance, and reduced cerebral blood flow.

The criteria established for the definition of active disease include a markedly elevated ESR, fever, and elevated white blood cell count.[8,16,22] These were not present in our case. Although recommended for patients with active disease by Nakao et al,[22] and by the Vasculitis Study Group of the National Institutes of Health,[23] corticosteroids and/or immunosuppressive or cytotoxic drugs have serious long-term complications in young children. Prognosis obviously depends on specific organ system involvement. Ishikawa[16] found an overall five-year survival rate of 83.1% (average age at diagnosis was 30.4 years). It is unclear at present whether age of presentation, degree of vascular involvement, or control of hypertension is the best prognostic indicator.

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Mucoid Impaction of Bronchus Proximal to Bronchogenic Carcinoma*

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A patient with left upper lobe atelectasis due to mucoid impaction of the left upper lobe bronchus was recently encountered and successfully treated with acetylcysteine (Mucomyst) and prednisone. After the atelectasis had improved and the lingular segment of the left upper lobe bronchus was patent, the upper division of left upper lobe bronchus was noted to be occluded by a squamous cell carcinoma. Septate fungal hyphae were seen in the mucosal plug. The unusual association of bronchogenic carcinoma and proximal mucoid impaction prompted this report.

Case report

A 66-year-old alcoholic male with cirrhosis of the liver, pancreatitis, and diabetes was admitted for evaluation of left upper lobe atelectasis (Fig 1) detected on a routine chest radiograph. He was a heavy smoker. Although he was not an allergic individual, his brother had asthma. Decreased breath sounds were present over the left upper lobe. There was no evidence of peripheral blood eosinophilia. Fiberoptic bronchoscopy revealed a large white, glistening mucous plug obstructing the left upper lobe bronchus. Microscopic examination of the mucous plug revealed septate hyphae with acute angle branching—consistent with *Aspergillus* (Fig 2). Prednisone and acetylcysteine were begun. One week later, a repeat chest radiograph revealed that the lingular segment of the left upper lobe bronchus was no longer obstructed (Fig 3); repeat bronchoscopy confirmed this finding. The upper division of the left upper lobe bronchus was still blocked by what appeared to be a tumor. Cytologic examination at this time revealed malignant cells in addition to septate hyphae. Subsequently, the patient underwent a left pneumonectomy. At surgery, the tumor was easily palpated in the left upper lobe. Pathologic examination revealed a poorly differentiated squamous cell tumor in the left upper division bronchus and postobstructive pneumonitis. Fungal serology and fungal cultures from bronchial washings were negative.

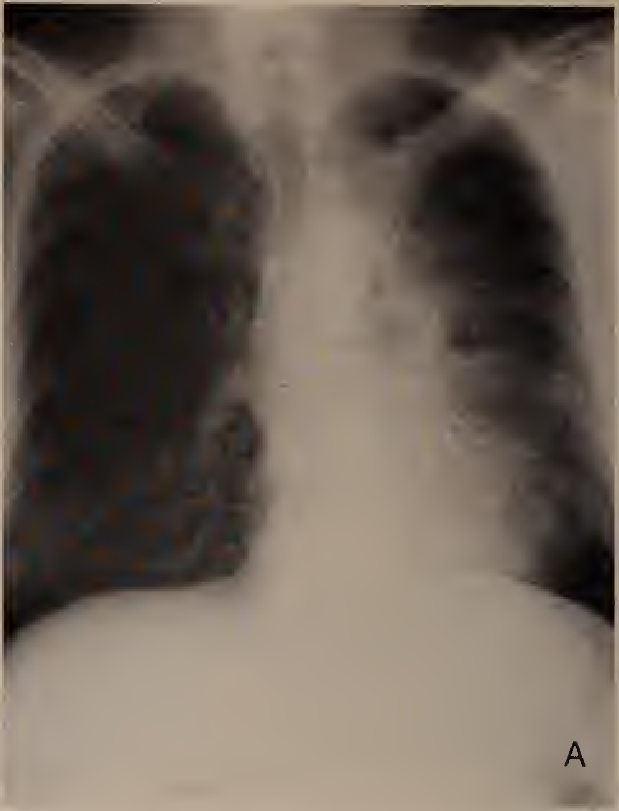

FIGURE 1. PA radiograph of the chest demonstrating left upper lobe atelectasis.

Comment

Mucoid impaction of the bronchi was first described by Shaw in 1951[1]; of his ten patients, eight had bronchial asthma and two had chronic obstructive bronchitis. Similar findings have been subse-

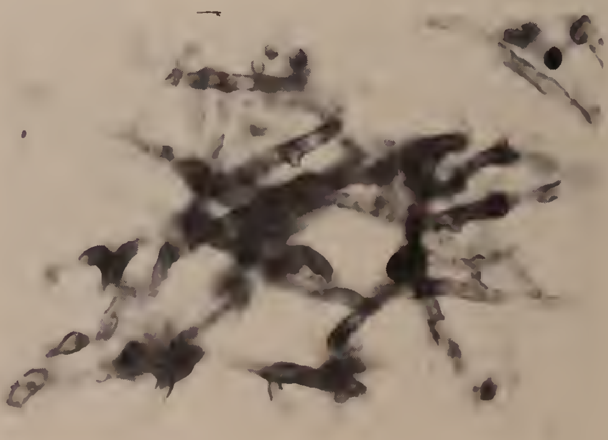

FIGURE 2. Fungal hyphae as seen on cytology smears.

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* Supported by the Veterans Administration.

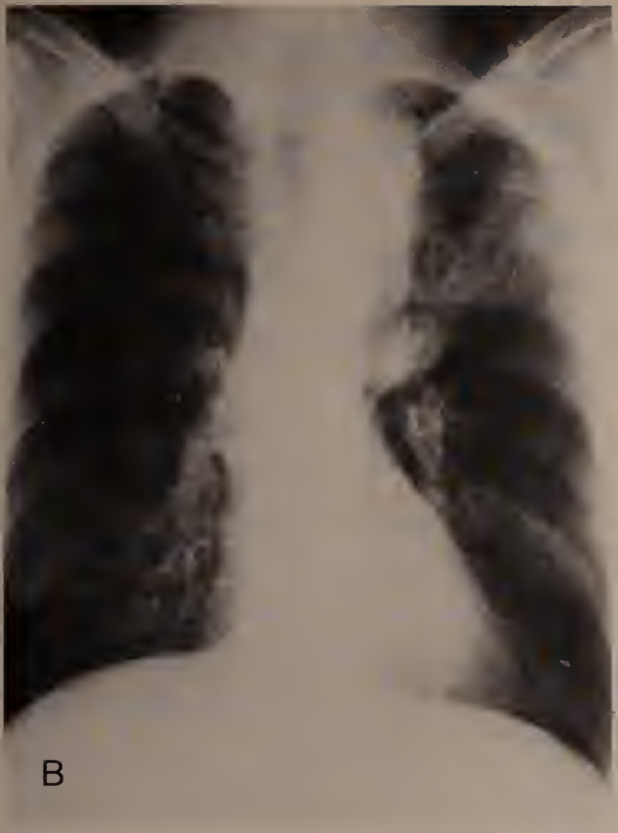

FIGURE 3. PA radiograph of the chest showing reaeration of lingula.

quently reported by other authors[2,3], and the association of *Aspergillus* hypersensitivity and bronchial asthma with mucoid impaction has been recognized.[4,5] Our patient did not have underlying bronchial asthma but demonstrated septate hyphae in his mucous plug.

The association of mucoid impaction with malignancy is not unusual, but such mucoid impaction is almost always distal to the obstructed bronchi.[6] Such bronchi trapped with mucus may be visible roentgenographically. The bronchi usually involved with mucoid impaction are the second-, third-, or fourth-order bronchi. In none of Hutcheson's 27 cases[7] was either a main-stem or first-order bronchus involved.

The presence of a mucoid plug proximal to a tumor in the upper division of the left upper lobe bronchus in association with a fungus represents a unique combination. Aside from the usual factors involved in mucous plugging, hypersecretion of viscid mucus and abnormal transport or excessive dehydration of the mucus have been implicated.[8] Which of these additional factors operated pathogenetically in this patient is difficult to assess. Additionally, the patient did not have underlying bronchial asthma, cystic fibrosis, or chronic bronchitis, diseases that are associated with mucoid impaction.

Medical therapy for mucoid impaction of bronchi requires acetylcysteine by IPPB or transtracheally.[9] Prednisone has also been recommended in patients who have bronchial asthma and complicating allergic bronchopulmonary aspergillosis.[4] In our patient, the mucoid impaction resolved after the institution of prednisone and acetylcysteine therapy in combination.

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Acknowledgments. The authors thank Elizabeth Volcko, CT (ASCP), for providing photographs of the cytology specimen. We are also thankful for critical review of this manuscript by Stanley Wallach, MD, Chief of Medical Service, Albany Veterans Administration Medical Center.

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Fibromuscular Dysplasia of Internal Carotid Arteries

With Doppler ultrasonic studies

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Fibromuscular dysplasia (FMD), an arterial hyperplasia, is a well-defined, nonatheromatous arterial disease of unknown etiology. The pathology usually involves the primary branches of the aorta, but secondary or even more distal branches may be affected.[1,2] FMD of the renal arteries was first described by Leadbetter and Burkland in 1938.[3] In 1964, FMD of the internal carotid arteries was reported by Palubinskas and Ripley[4] and by Anderson.[5] Regardless of the vessels involved, FMD occurs predominantly in middle-aged women and it is an important cause of remediable renovascular hypertension.

Patients with FMD of the carotid arteries may be asymptomatic, or they may have a variety of nonspecific symptoms of ischemia. From a series of 12 patients, all of whom had easily detectable murmurs over the neck, Morris et al[6] reported a variety of cerebrovascular symptoms such as acute or migraine headache, visual disturbances such as diplopia or diminished vision, motor disturbances including transient weakness or paralysis, sensory disturbances such as numbness or paresthesia, and vestibular symptoms like dizziness or tinnitus. Focal seizures were the presenting symptom in one case, and personality changes were noted in three patients.

Definitive diagnosis of FMD is usually made on the basis of carotid arteriography, which has revealed some characteristic features. Houser and his colleagues[7] described the arteriograms of 52 FMD patients, culled from a total of 7,500 arteriograms, and found in the majority of cases that the dysplasia involved the middle 2 to 3 cm of the cervical portion of the artery. The typical "string of beads" appearance invariably produces narrowing of the lumen, but complete obstruction is rare. Wylie et al[8] and Ringel et al[9] have both noted a strong association between FMD and intracranial aneurysm.

Although arteriography may be required for unequivocal diagnosis, this procedure is not without risk, particularly in elderly patients. Both Mueller[10] as well as Schlagenhauff and Napoli[11] have pointed to the value of Doppler ultrasonography as a screening device in the diagnosis of occlusive disease of the internal carotid arteries. The following case history is presented to demonstrate the value of this noninvasive procedure as a screening device.

Case report

A 47-year-old woman was admitted for evaluation of a bruit over the left side of the neck. The bruit has been discovered by her private physician two weeks earlier during the course of a routine examination.

Although the patient did not spontaneously complain of neurologic symptoms, questioning revealed a history of occasional dizziness since the age of 21. The dizziness was described as lightheadedness lasting up to two minutes and occurring with an average frequency of once every three months. These episodes had increased in frequency in recent months. Questioning also elicited a two-month history of frequent dull headaches localized in the right temporal region. The headaches usually began in the morning, lasted for several hours, and were relieved by aspirin and caffeine (Anacin). There were no visual symptoms, such as diplopia, blurring of vision, or transient blindness, and no complaints of numbness, weakness in the extremities, or speech difficulty.

Past medical and family history were unremarkable. There was no history of hypertension, and the patient's blood pressure was 110/80. The balance of the physical examination gave normal results. The neurologic examination revealed a bruit over the left carotid artery and a slight decrease in the right nasolabial fold suggestive of a mild right facial weakness.

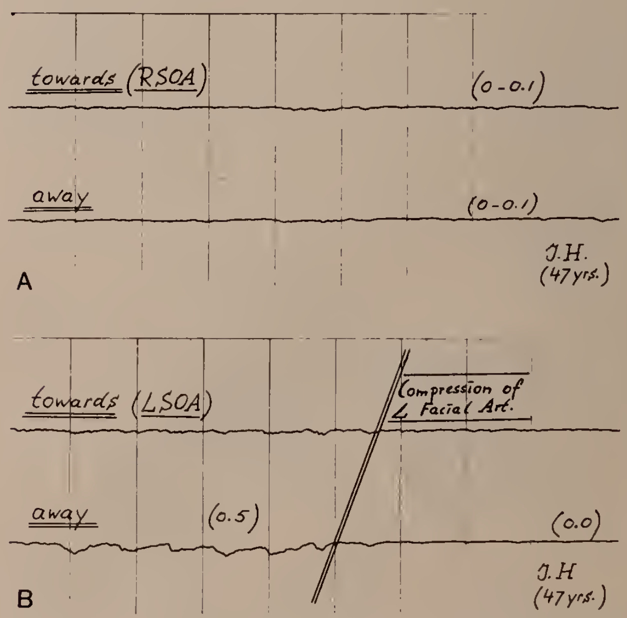

FIGURE 1. Doppler ultrasonograms. (A) Right supraorbital artery. (B) Left supraorbital artery.

Laboratory studies. Routine blood studies and urinalysis gave normal results. Directional Doppler ultrasonic studies using Model 806 (Parks Electronics Laboratory, Beaverton, Oregon) revealed normal flow patterns of both common carotid arteries. The blood flow of the right supraorbital artery was moderately to markedly decreased in normal direction and at times slightly reversed, suggesting a high degree stenosis of the right internal carotid artery at or above the bifurcation (Fig 1A). The blood flow of the left supraorbital artery was markedly decreased in the normal direction, and at times moderately reversed (Fig 1B). Compression of the left facial artery produced cessation of blood flow in the left supraorbital artery.

A transfemoral selective bilateral carotid and vertebral arteriogram was performed one week later. The common and external carotid arteries were patent (Fig 2). The cervical segments of both internal carotid arteries showed a beaded appearance beginning approximately 2 to 3 cm distal to the common carotid bifurcations and extending for 4 to 5 cm. The left side (Fig 2B) was slightly more involved than the right (Fig 2A).

The left vertebral artery, which arose as a direct branch of the aortic arch, showed a minimal irregularity in the neck, perhaps due to the same disease process. The right vertebral artery was normal in appearance. Intracranially, the anterior and middle cerebral arteries were normal, except for a peripheral branch of the left middle cerebral artery, which was apparently occluded. There was no evidence of an aneurysm, and the venous patterns were normal.

Comment

FMD of the cephalic arteries may be an incidental finding discovered during angiography for evaluation of various conditions.

Arteriosclerosis is the most common cause of angiographically demonstrated narrowing of an artery. Houser et al[7] reported FMD being probably the second most common cause (approximately 1% of cerebral angiograms). In a review of nonatheromatous causes of stenotic and occlusive internal carotid artery disease, Momose and New[1] found 20 cases of FMD out of 7,000 carotid arteriograms (over a period of eight years).

The diagnosis of cephalic FMD depends on the characteristic angiographic appearance of "beaded" or "corkscrew" vessels. This alternating constriction and dilatation of the normally smooth arterial outline, affecting the middle 2 to 3 cm of the cervical portion (distal to the usual site of arteriosclerotic plaques), adjacent to the second cervical vertebra, is pathognomonic. The process generally extends extracranially up to the level of the carotid foramen. Intracranial involvement has apparently not been observed.[6]

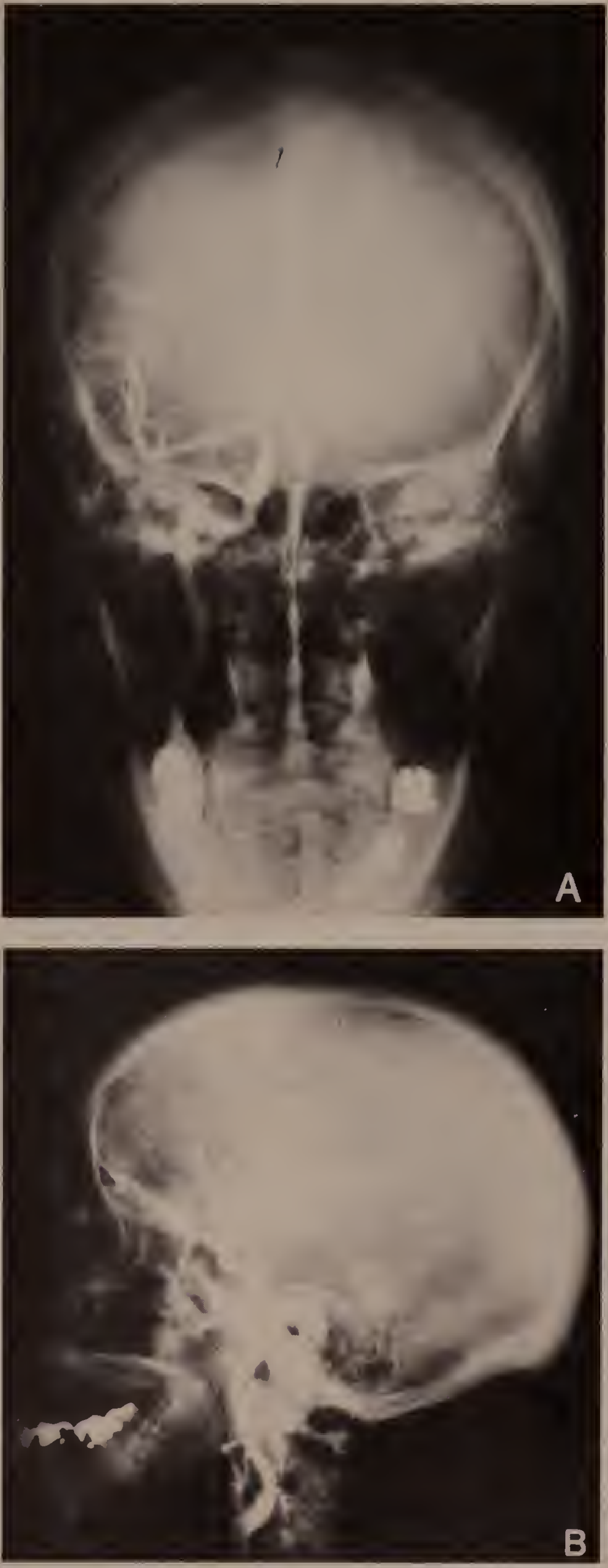

FIGURE 2. Arteriograms of (A) right carotid artery system, and (B) left carotid artery system.

Pathologically, FMD is a fibrous proliferation of the media by hyperplasia of the muscular and fibrous tissue. The elastic membranes may be split and distorted. The classical intimal and medial hyperplasia may be present, mainly in females. In some male cases the lesion may be caused by extra-arterial adventitial and periarterial fibrous bands.

The etiology is unknown, although the combination of similar age and sex, fibromuscular dysplasia and aneurysms, suggest a common etiologic origin. According to Claiborne,[12] physical strain to the vessel may play a role, but probably the major etiology remains obscure.

FMD should especially be suspected in women between the ages of 20 to 50 years with relatively nonspecific neurologic symptoms. Anderson[5] stressed the preponderance of female cases (85%) and Palubinskas and Ripley[4] the frequent combination with intracranial aneurysms. It is possible that transient ischemic attacks, basilar artery insufficiency, and repeated minor strokes can be caused by this abnormality.[13,14]

Doppler ultrasonic flow studies in internal carotid artery disease is a well-known and useful screening procedure. The method is painless, relatively simple, and easily available.[10,11] The hemodynamically important evaluation of the carotid artery system by Doppler ultrasonography in patients with equivocal neurologic symptoms, asymptomatic bruit in the neck, or in patients discovered to have FMD of other arteries and intracranial aneurysms (with or without subarachnoid hemorrhage) is therefore recommended.

Since this study was undertaken, improved devices are available in which Doppler ultrasound can be utilized (Angioscan-spectrum analyzer). In addition, the proper gels have been found nontoxic in small quantities and the probe can be placed safely at the internal carotid artery in the tonsillar fossa, although throat irritations cannot always be avoided. With these new instruments and techniques the diagnosis of FMD is now easier and more precise. In certain cases this screening procedure would have to be followed by angiography.

A technique for graduate internal dilatation of the internal carotid artery was employed therapeutically in eight instances with success by Morris et al[6]. The follow-up evaluations suggested that this procedure was effective for periods up to four years. Since the process is usually high in the neck, definite reconstruction is apparently hazardous and at times impossible. The operation discussed appears to be simple, safe, and easier than other approaches. Associated arterial coiling, kinking, and aneurysmal dilatation were treated by primary excision and end-to-end anastomosis. The symptoms subsided after surgery.[15] When fibrous bands are noted, simple adventitial stripping suffices to release the stenotic areas.[13]

The prognosis of FMD remains unclear at the present. Our patient's FMD has not progressed further. She is followed at regular intervals. Surgical intervention may become necessary in the future.

Summary

A woman with FMD of both internal carotid arteries and probably of the left vertebral artery is presented. The initial work-up included Doppler ultrasonography of the carotid artery system. The ultrasonogram was distinctly abnormal and led subsequently to the specific diagnosis by angiography. The patient's symptoms were treated conservatively.

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Acknowledgments. We would like to thank Lillian Leiber, Ph.D., for the her help in reviewing this manuscript and J. Napoli for his technical assistance.

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Moyamoya Disease

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The first reported cases of moyamoya disease are generally attributed to Nomura[1] and Takeuchi[2] in 1961. "Moyamoya" is a Japanese term describing "a hazy scene of smoke floating in the air." It refers to the angiographic appearance characteristic of this condition and consists of a narrowing or occlusion of both internal carotid arteries at the level of the carotid siphon together with an abnormal hemangiomatous vascular network at the base of the brain. Until approximately 1969 it was believed that moyamoya disease was unique to Japanese and Japanese-Americans but several reports from Europe and the United States have added nonoriental patients to the list. Dumas et al[3] reported 42 black children and Taveras[4] added another black child and a black infant. Makoyo[5] reported the first two cases in black adults, one of whom presented with hemiparesis and the other with subarachnoid hemorrhage. We report here, to our knowledge, the fourth case of moyamoya disease in a black adult.

Case report

A 26-year-old right-handed black woman (known to be hypertensive but noncompliant with medications) developed a right occipital, throbbing headache on the morning of December 11, 1980 and that evening became acutely dysarthric and clumsy with the left hand. On examination in the emergency room of Lydia E. Hall Hospital blood pressure was 180/120, pulse 88 and regular, the carotids were 1+ bilaterally with no bruits in the neck or the head. Her mental status was essentially normal except for mild mental retardation. There was no aphasia but there was a prominent dysarthria secondary to a marked left central facial paresis. Also found in the cranial nerve examination was a left homonymous hemianopsia and a right gaze preference.

There was a 4+/5+ weakness of the distal left upper extremity. Primary and cortical sensations were impaired on the left side of the body. Fine manipulation was impaired in the left hand and reflexes were normoactive bilaterally with both plantar reflexes downgoing. She had ongoing focal motor seizures of the left side of the face on arrival at the emergency room (at approximately 9:00 PM) which were controlled with phenytoin.

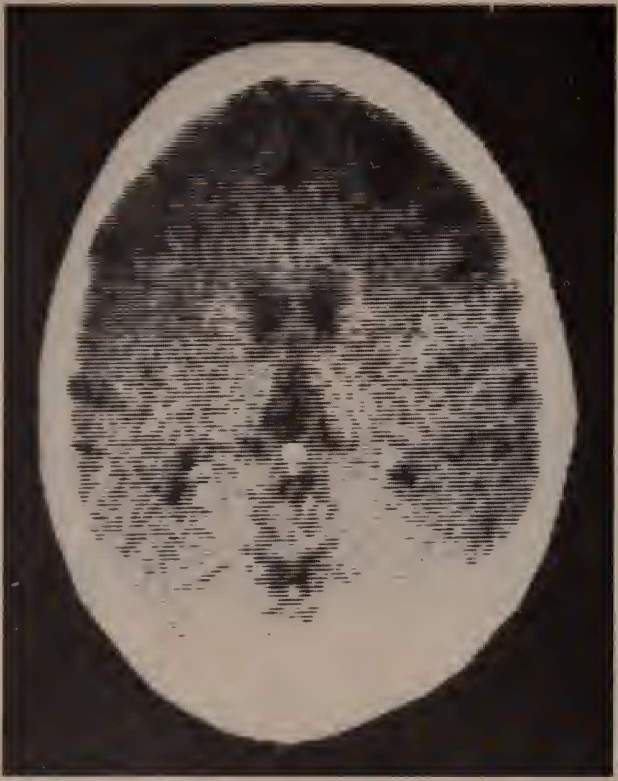
FIGURE 1. Computerized tomography scan of head (right side of figure represents right side of brain) at level of pineal gland and third ventricle demonstrating wedge-shaped low density in right parietal lobe.

Computed tomography of the head showed a wedge-shaped area of decreased absorption in the right parietal lobe compatible with a cerebral infarction (Fig 1). Results of the following blood tests were reported as normal: complete blood count with differential, SMA-6 and SMA-12, prothrombin time/partial thromboplastin time, ESR, VDRL, T-3 and T-4, serum protein electrophoresis, lipoprotein electrophoresis, cholesterol, triglycerides, sickle cell preparation.

The patient's facial weakness and dysarthria improved over several days in the hospital and she ambulated well almost immediately. However, the left-hand weakness remained unchanged throughout the hospital stay. Blood pressure was controlled on hydrochlorothiazide. She was started on a regimen of aspirin, 10 grains twice daily.

The patient was lost to follow-up for several weeks but then readmitted to Long Beach Memorial Hospital on January 26, 1981 for transfemoral selective cerebral angiography (Figs 2, 3). Both internal carotid arteries were of markedly decreased caliber and both terminated abruptly just distal to the origins of the ophthalmic arteries. Late films demonstrated slight flow in the anterior cerebral arteries but the middle cerebral arteries did not fill at all. In the area

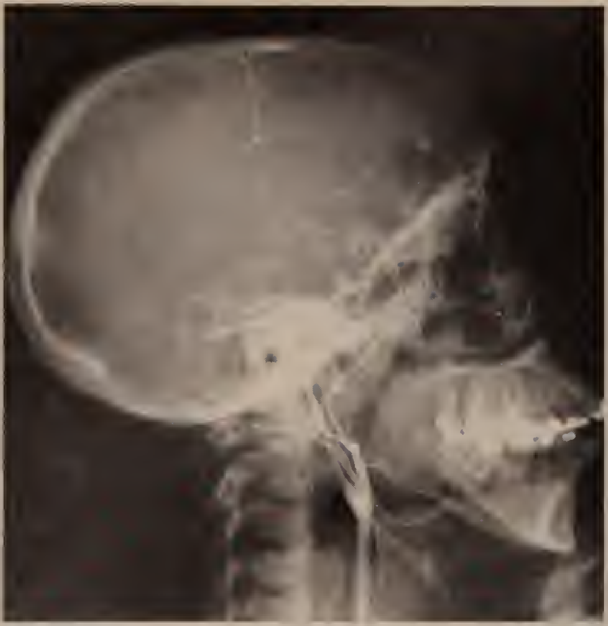

FIGURE 2. Right carotid arteriogram, right lateral view. Striking absence of filling of anterior and middle cerebral arteries with prominent superficial temporal and middle meningeal branches of external carotid artery. Cloud-like ("moyamoya") collection of fine vessels is seen in basal ganglia region (area above the sella turcica) and several small areas of collateral circulation between external and internal carotid systems are seen peripherally.

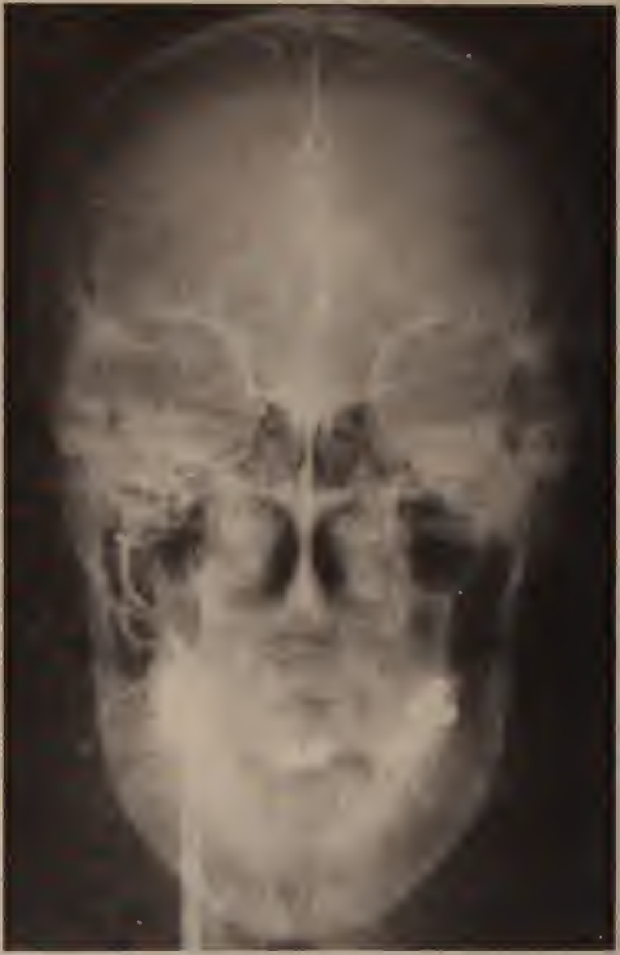

FIGURE 3. Right carotid arteriogram. Internal carotid artery appears to terminate abruptly at level of siphon. Slight filling of anterior cerebral arteries is not visualized at all while external carotid branches are clearly visible.

of the basal ganglia a cloud-like heavy collection of vessels was seen as well as scattered areas of collateral circulation between the external and internal carotid systems. Due to the patient's intolerance of the procedure, the vertebrobasilar system could not be studied. Unfortunately, the few films made of the left carotid system were lost by the x-ray department.

It was the opinion of the vascular surgeon that the patient should continue with conservative medical management (aspirin and physical therapy) rather than risk a surgical procedure of questionable benefit.

The patient was lost to follow-up for several months and when next seen was noted to have contractures of the left hand for which she is now seeking surgical advice. She remains on aspirin therapy with no stroke recurrence nearly a year after the original cerebral infarction.

Comment

This patient appeared with a cerebral infarction as did one of the two black adults with moyamoya disease reported by Makoyo[5] and the black adult with associated Hageman factor deficiency reported by Dhopesh et al.[6] Makoyo's other patient had a subarachnoid hemorrhage. Moyamoya generally shows as subarachnoid hemorrhage in adults and strokes in children.[7] However, even in the largest review of cases numbering 111 patients, there were 17 children and 19 adults who did not fit this general pattern.[8] Hemiparesis and hemisensory deficits in moyamoya historically improve substantially with time but there are frequent recurrences of the original deficits.

The pathogenesis of moyamoya disease is not clear. Whether the disease is hereditary, congenital, or acquired remains controversial. The scant autopsy material available has not shown a consistent pathologic process. All eight autopsied cases have shown intimal thickening, a nonspecific finding. The abnormal vascular network in the basal ganglia region is usually formed by greatly dilated cerebral perforating arteries. These include the lenticulostriate, anterior choroidal, and thalamoperforate arteries and branches arising from the circle of Willis and the proximal anterior, middle, posterior communicating, and posterior cerebral arteries. In addition, there are extensive transdural anastomoses supplied mainly by branches of the external carotid and ophthalmic arteries including the middle meningeal, superficial temporal, and occipital arteries.

Extensive leptomeningeal collaterals develop between these and the posterior pericallosal and posterior choroidal arteries and cortical branches of the anterior, middle, and posterior cerebral arteries, all of which are normally supplied by the internal carotid and vertebrobasilar systems.

Gadoth and Hirsch[9] suggest that perhaps there are two distinct clinical groups, the first consisting of children with a "primary" form of moyamoya that causes hemiplegia and is frequently nonprogressive, and a second group of children and adults with various underlying diseases who develop an "acquired," usually progressive, form of moyamoya. Examples of disorders that have been associated with a moyamoya angiographic picture are: tuberculous and pyogenic basal meningitis, neurofibromatosis, sickle cell anemia, atherosclerosis, postradiation biochemical abnormalities of connective tissue, progressive myopathy, and stenosis of brachial and renal arteries due to intimal thickening. Most authors consider the carotid stenosis to be primary in the pathogenesis of moyamoya and the characteristic vascular network to be secondary.

The patient presented here would likely be part of the primary group. She had no underlying illnesses except for mild hypertension, and chemical and radiographic diagnostic studies were negative except for the moyamoya vascular network. It is particularly notable in our patient that she may have had several relatives with cerebrovascular problems similar to her own. A brother and sister died in their thirties of unknown causes with "seizures in the head." The patient's mother had "poor circulation" and died at age 60 of a "stroke." The patient's paternal grandparents both died of "strokes" but they were in their 70s and 80s. The maternal grandmother, however, died at age 25 of a "bleeding tendency." Because of the patient's limited intellectual capabilities and her inability to contact other family members, a more detailed family history could not be obtained.

Of the approximately 600 cases of moyamoya reported in Japan to date, 7% are considered familial.[9] A total of 21 families are considered "moyamoya families" with two or more siblings or a sibling and a parent sharing the abnormality. Yamada et al[10] reported a pair of monovular twins both of whom had well-documented moyamoya disease and Srinivas et al[11] reported another set of identical twins, one with a characteristic moyamoya angiogram and the second with a "partial occlusion of the carotid and late visualization of the middle cerebral artery." These cases lend support to a genetic factor in the pathogenesis of moyamoya disease.

There is no universally accepted treatment for moyamoya disease. When the disease manifests as transient ischemic attacks, medical management in the past has variously consisted of steroids, vasodilators, and low-molecular dextran. Surgical management has consisted of superior cervical ganglionectomy and cervical perivascular sympathectomy. These modes of therapy seem to have made little improvement in the recurrent symptoms in these patients. Several recent reports[12-14] have noted good to excellent results with "encephalo-myo synangiosis," where a vascularized portion of temporalis muscle is grafted onto the brain surface in the hope that collaterals will form with vessels on the surface of the brain, and STA-MCA (superficial temporal artery-middle cerebral artery) anastomosis. However, fewer than 35 cases have been reported, and the efficacy of these procedures is still in question. With the widespread acceptance of antiplatelet agents for transient attacks of atherosclerotic origin, it would seem reasonable to attempt treatment of these patients in a similar fashion.

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Primary Lymphoblastic Lymphoma of the Ileocecal Valve

Manifesting as an ileocecal intussusception

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Ileocecal intussusception* is frequently encountered in the pediatric age group, especially during the first six months of life.[1,2] Approximately 95% of these young patients do not present with a preexisting anatomic lesion in the head of the intussusception. In the remaining 5%, the most common causes are Meckel's diverticulum, benign polyps, and nonneoplastic lymphoid hypertrophy in the terminal ileum and cecum. In adult patients, the leading causes for ileocecal intussusception are benign or malignant neoplasms of the terminal ileum (more common) and of the cecum (lipomas, carcinoids, and adenocarcinomas).[3,4] During the past few years, we have also observed two cases of ileocecal intussusception due to cecal adenocarcinoma.

We briefly report an unusual case of ileocecal intussusception due to primary lymphoblastic lymphoma of the ileocecal valve in a female patient who underwent an urgent laparotomy with preoperative diagnosis of acute appendicitis.

Case report

A 33-year-old woman was admitted in October 1980 with diagnosis of acute appendicitis. The patient had undergone an extrauterine pregnancy 11 years previously. She experienced mild, continuous abdominal pain in the epigastrium and right lower quadrant with nausea and slight temperature elevation for about ten days before admission. In the hours immediately prior to admission, the right lower quadrant pain had become severe and was accompanied by vomiting and higher temperature.

Physical examination revealed localized pain and rebound tenderness in the right lower quadrant, where a tender mass could be felt. Borborygmi were present. Admission hematocrit was 39%, and white blood count was 11.500/mm³. Both liver and renal function were normal. Blood pressure was 130/90 mm Hg; pulse was 96 and regular; and rectal temperature was 38.5°C.

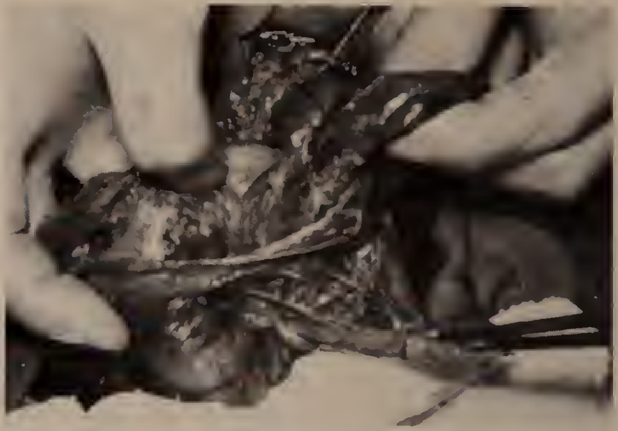

FIGURE 1. Reducible ileocecal intussusception.

After some hours of fluid therapy, the patient underwent a laparotomy for acute appendicitis. At surgery, a reducible ileocecal intussusception was found (Fig 1). A mass was palpable in the cecum and numerous large lymph nodes could be seen in the mesentery. Biopsy of the mass was performed by cecotomy (Fig 2), and frozen section established a diagnosis of lymphoma. A right hemicolectomy with ileotransverse colostomy was performed. Biopsies of lymph nodes and liver were also performed. The spleen was normal. Final pathologic examination established a primary lymphoblastic lymphoma (Kiel classification)[5] of the ileocecal valve (Fig 3), without extraintestinal involvement; the enlarged lymph nodes were all inflammatory in nature and tumor free.

The postoperative course was uneventful. All further investigations (white blood count and differential, immunologic diffusion investigation, IgA, IgM, IgG, and bone marrow biopsy) were negative for

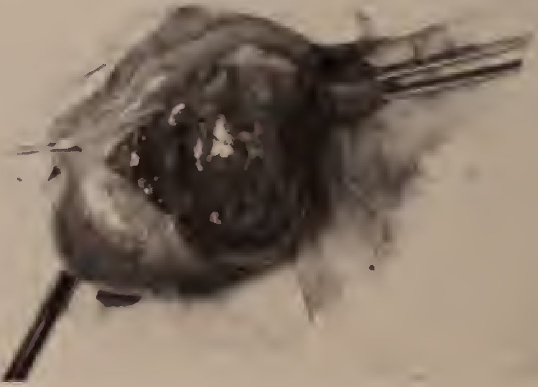

FIGURE 2. Lymphoma of the ileocecal valve visible by cecotomy.

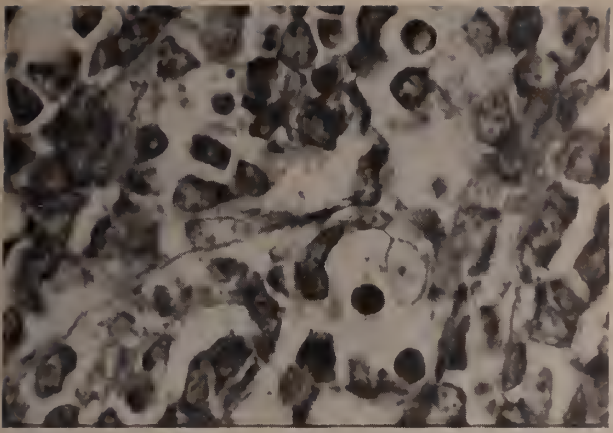

FIGURE 3. Photomicrograph of primary lymphoblastic lymphoma of the ileocecal valve: Diffuse infiltration of submucosa by neoplastic lymphoid cells with round or ovoid nucleus, one or more prominent nucleoli, and scanty basophil cytoplasm (Giemsa ×400).

systemic disease. The patient was discharged on the 15th postoperative day and later underwent chemotherapeutic treatment with cyclophosphamide, vincristine (Oncovin), and prednisone in an outpatient clinic.

Six months later, the patient underwent an investigation to determine the disease staging[6]: laparoscopy, bone marrow biopsy, lymphangiography, chest x-ray, and head, eye, ear, nose and throat examination. Laboratory findings gave a negative result on lymphoma diffusion. At present, the patient is doing well.

Comments

Lymphomas of the gastrointestinal tract are rare; they represent about 1% of all gastrointestinal neoplasms[7] and about 4% of lymphomas of all sites.[8] Both Hodgkin's lymphomas and non-Hodgkin's lymphomas may produce similar lesions that may lead to intussusception. Such complication is more common for the small-bowel lymphomas[9]: Burman and Van Wyk[10] noted a 20% to 30% incidence of intussusception in ileal lymphomas. If this disease is localized in the cecum, it seems to have a good prognosis,[2] although the prognosis generally depends on the histologic type[8,11]: Our case involved a primary lymphoblastic lymphoma, which usually presents a more severe prognosis.[5]

If the patient undergoes a barium enema examination, it is possible to demonstrate, in addition to the intussusception, the existence of a polypoid mass in the cecum, as reported by Sicular and Ossias.[2] Our patient, however, did not undergo a barium enema examination because an urgent laparotomy for acute appendicitis was performed.

In our case, the preoperative diagnosis was wrong because both the clinical history and the physical examination presented a picture quite similar to that of acute appendicitis. Besides, there were not true signs of intestinal obstruction: In our opinion, this situation was due to the location of the lymphoma in the ileocecal valve, which permitted an almost normal canalization and, perhaps, an intermittent intussusception. On the other hand, the urgent laparotomy (although with a mistaken preoperative diagnosis) and the correct intraoperative diagnosis permitted one to perform a radical and, in our opinion, timely operation. The precocity and radical nature of the treatment were confirmed by the negativity of all histologic reports concerning tumor involvement of the nodes and liver at the time of surgery.

Although other authors[7,12] use postoperative radiotherapy (3,000 to 4,500 rads), we utilized postoperative chemotherapy (cyclophosphamide, vincristine, prednisone), followed by disease staging six months later. At present, however, several authors[7,8,11] believe that postoperative adjuvant radiotherapy and chemotherapy do not produce a statistically significant difference in an overall five-year survival after curative resection of non-Hodgkin's gastrointestinal lymphomas at stage I.

The present good condition of the patient and the negativity of the disease staging confirm the propriety of our therapeutic approach, and we are optimistic about the future evolution of this case.

Summary

An unusual case of primary lymphoblastic lymphoma of the ileocecal valve manifesting as an ileocecal intussusception is presented. Curative resection, followed by adjuvant chemotherapy, was performed. Etiopathogenetic, diagnostic, and therapeutic aspects of intussusception in adults as well as features of non-Hodgkin's gastrointestinal lymphomas are briefly discussed.

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Fibrosing Mediastinitis

Causing pulmonary artery and vein obstruction with hemoptysis

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The following case report describes a patient who had fibrosing mediastinitis possibly secondary to histoplasmosis, which caused complete obstruction of the right middle and lower lobe pulmonary artery and vein. The simultaneous involvement of the artery and vein is uncommon, thus the inclusion of this case for future reference.

Case report

A 23-year-old woman arrived at the emergency room with paroxysmal coughing and hemoptysis (60 to 100 cc within 24 hours).

She had previously been in good health, but had had a titer-documented (less than 1:8) histoplasmosis pneumonitis 18 months before the present admission. Since that time, she had noticed occasional dyspnea on exertion, primarily with singing, as well as paroxysms of coughing and a slight temperature elevation. Chest x-ray film findings had been unchanged since her previous attack and showed only a small finely calcified nodule in the right midlung field. Prior to admission her symptoms increased in severity, and hemoptysis was first noted.

She has a markedly positive family history for tuberculosis (mother, aunt, and grandmother), pulmonary infections, and thyroid disease.

No adenopathy, wheezes, or organomegaly were present. Chest x-ray film findings were unchanged from previous examinations except for an increased radiodensity in the right lung hilus. White blood count, hemoglobin, and serum profiles were normal. Tuberculosis skin test, histoplasmosis titers, and sputum cultures were negative.

Bronchoscopy, the day after admission, revealed some fresh blood evident in the right lower lobe segments, but no distinct bleeding site was visualized; findings were normal. A lung scan revealed lack of perfusion to both right middle and lower lobes. Pulmonary angiography confirmed the obstruction of both right middle and lower lobe arteries (Fig 1). Tomography revealed a hilar density with some indwelling calcifications in the lower hilus (Fig 2). During this time, the patient continued to have 50 cc of hemoptysis each day.

Because of her continued symptoms, a thoracotomy was performed, which disclosed that the major fissure and pulmonary vessels were completely encased in a fibrous mass. Biopsy specimen showed fibrous tissue and no evidence of any malignant conditions. Telangiectatic vessels were present on the surface of the middle and lower lobe. The middle and lower lobes were removed by amputation through the fibrous mass, revealing complete obstruction of both lower pulmonary artery and vein. The bronchus was closed with interrupted stitches, and the thrombosed vessels oversewn.

Postoperatively the patient recovered uneventfully without further hemoptysis. Pathologic sections revealed fibrosing mediastinitis with caseating granulomas and eosinophilic pneumonia. Cultures did not grow out acid-fast bacilli (AFB) or *histo-*

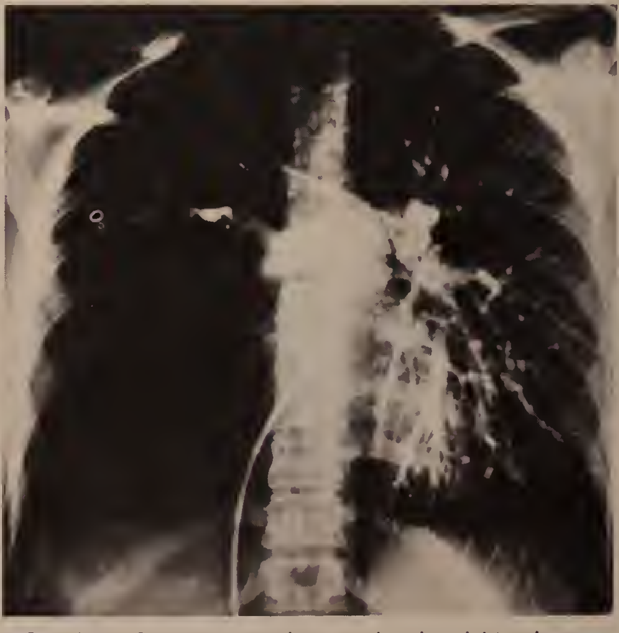

FIGURE 1. Pulmonary angiogram showing right pulmonary artery obstruction.

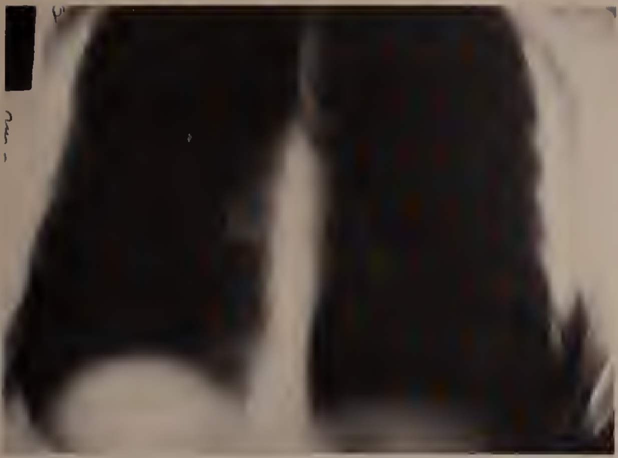

FIGURE 2. Tomogram showing right hilar calcification.

plasmosis capsulatum. Discharge was on the eleventh hospital day.

The patient was readmitted three months later with recurrent coughing and hemoptysis. Chest x-ray film findings were unchanged and histoplasmosis titers were negative (Fig 3). Bronchoscopy revealed an actively inflamed bronchial stump, which was then cauterized. Washings were negative for AFB, fungus, and cytologic evidence. Prednisone (10 mg every other day) was begun with disappearance of pulmonary symptoms and rapid recovery. Low-dose prednisone (5 mg every other day) was continued for three months and then discontinued.

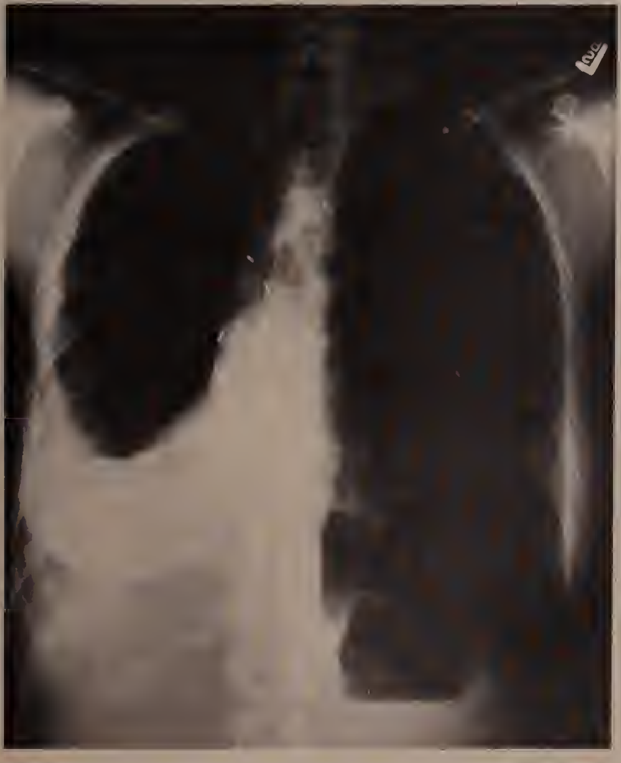

FIGURE 3. Postoperative chest x-ray.

The patient is now one year postsurgery with no pulmonary symptoms and no exercise limitations.

Comment

Fibrosing mediastinitis is a chronic scarring process; it can involve any mediastinal structure, including superior vena cava, tracheobronchial tree, esophagus, pulmonary arteries, and veins.[1] Clinical symptoms of this process depend on the severity of the obstruction of the involved structures, namely dysphagia, dyspnea, hemoptysis, and coughing. Complete obstruction of both pulmonary artery and vein is extremely uncommon,[2] while involvement of the tracheobronchial tree represents only 4% to 6% of all reported cases.

Etiologic factors in the disorder have been speculated on in other reports.[3,4] Granulomatous disease (histoplasmosis, tuberculosis, syphilis), drug therapy, trauma, and pyogenic and upper respiratory infections have all been cited. In this case report, histoplasmosis was suspected because of elevated acute serum titers and because old granulomata might have initiated the process that appears to be an inappropriate response to an inflammatory stimulus with bizarre forms of collagen organization.

Surgery at times is necessary in this disease to establish the diagnosis or to treat severe complications of mediastinal compression, but in general it is to be avoided.[5,6] Some physicians have advocated early surgical intervention for enlarging noncalcified granuloma and extirpation or evacuation of casseous contents to interrupt the mediastinal lymphatics and prevent future fibrosis. Most patients have inactive disease at the time of exploration, which is required to exclude malignant conditions. There is no evidence that treatment in late stages with amphotericin B, steroids, or other agents helps change the course of this indolent process. Bilobectomy performed in this case alleviated the preoperative symptoms of coughing, hemoptysis, and dyspnea, and at one-year follow-up the patient is fully active with stable chest x-ray film findings. However, it should be stressed that fibrosing mediastinitis is not a surgical disease, and should be treated nonoperatively whenever possible.

Summary

A young woman had increasing fatigue, dyspnea, and hemoptysis over an 18-month period. Work-up revealed a mediastinal mass obstructing the right middle and lower lobe pulmonary artery and vein. Bilobectomy was performed because of continued symptoms, and biopsy specimen showed a fibrosing mediastinitis, possibly secondary to histoplasmosis.

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■

Hemolytic Disease of Newborn Due to Anti-Duffy (Fy^{a})

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The discovery of the Duffy blood group system was reported by Cutbush et al early in 1950.[1] The first case of hemolytic disease of the newborn (erythroblastosis fetalis) caused by anti-Fy^{a} was reported in 1956 by Baker et al.[2] Since that time, 18 more cases have been published in the English literature.[3] The use of the results of serial amniotic fluid analyses in the management of Duffy sensitization, similar to that for Rh sensitization, has been reported in only two previous cases.[4] We report an additional case of hemolytic disease of the newborn due to anti-Fy^{a} which was successfully managed by the use of results of serial amniotic fluid analyses.

Case report and serologic findings

A 34-year-old white woman, gravida 4 para 1, was seen at 9 weeks' gestation. Prenatal laboratory data showed a positive indirect Coombs' test result. The antibodies were identified as anti-Fy^{a} and anti-E with antiglobulin titers of 1:4 and 1:1, respectively. The patient's blood type was A Rh+ (CDe), Fy(a−b+). Her husband was typed as O Rh+ (CcDEe), Fy(a+b−).

Past History. Pertinent history included a splenectomy performed 17 years prior to this admission for hereditary spherocytosis with an unrecorded quantity of blood transfused at that time; and eight years prior to this admission an incomplete abortion during the first trimester. During her second pregnancy 6 years before this admission, at 27 weeks' gestation she was found to have a positive indirect Coombs' test result. A weakly reactive anti-Fy^{a} was identified. At 38 weeks' gestation the anti-Fy^{a} titer increased to 1:8. A relatively healthy baby was delivered by cesarean section. The baby's blood type was O Rh+ Fy (a+b+) with a negative direct Coombs' test result. The baby was discharged on the third day, requiring no special treatment. Two years preceding this admission she suffered another miscarriage at 17 weeks' gestation. At this time, the patient was found to have anti-E in addition to anti-Fy^{a}.

At 27 weeks' gestation, the titers for anti-Fy^{a} and anti-E were 1:8 and 1:16 respectively. At 30 weeks' gestation titers for both antibodies increased to 1:32 and subsequently remained unchanged for the remainder of the pregnancy. Amniotic fluid analyses were carried out beginning at 30 weeks' gestation and repeated at 2-week intervals until 36 weeks' gestation. The results of ΔOD_{450} were all found in the midzone of Liley's chart[5] with gradual progression towards the upper zone.

An elective cesarean section was performed at 37 weeks' gestation. A male infant weighing 2,900 g was delivered with an Apgar score of 9 at 1 and 5 minutes. The cord hematocrit was 30% with 9.1% reticulocytes; blood type was O Rh+ (CcDEe), Fy(a+b+) and a direct Coombs' test was weakly positive. The cord bilirubin was 4.5 mg/dL (76.95 μmol/L). Only a weakly reactive anti-Fy^a was detected in the cord serum. An eluate was prepared from the cord cells by the heat elution method as described by Landsteiner and Miller.[6] The only antibody identified in this eluate was anti-Fy^a. A double-volume (450-mL) exchange transfusion was performed within two hours of birth using group O Rh+, E−, Fy^{a-}, fresh (48 hours old) blood. The baby's bilirubin was 3 mg/dL (51.3 μmol/L) immediately after exchange transfusions, 9.6 mg/dL (164.16 μmol/L) at 24 hours, and 12.5 mg/dL (213.75 μmol/L) at 48 hours. Jaundice cleared gradually and the baby was discharged on the tenth day in good health.

Comment

Theoretically, any IgG antibody against a red cell antigen that is capable of crossing the placenta can be cause of hemolytic disease of the newborn.[7] Although Duffy antigen has been implicated as a cause of hemolytic disease of the newborn, it is an infrequent one because the antigen is a poor stimulus to antibody production following a transfusion or pregnancy.[8] However, anti-Fy^a and anti-Fy^b both have been implicated in fatal transfusion reactions; to date 19 cases of erythroblastosis fetalis due to anti-Fy^a have been recorded in the English literature.[3] Out of a current total of 20 cases, 13 mothers (65%) had received blood transfusions prior to the affected pregnancy. Seven infants (35%) required exchange transfusions and three (15%) neonatal deaths occurred. This perinatal mortality rate of 15% approximates that reported as resulting from Rh isoimmunization during the preamniocentesis era.[3,9] As demonstrated by Greenwalt et al[10] there is no correlation between the maternal anti-Fy^a titers and the severity of hemolysis in the newborn infant. For this reason we recommend that serial amniotic fluid analyses be included in the prenatal management of all patients who are sensitized to Duffy (Fy^a) antigen, regardless of the maternal antibody titers, when the father is shown to have the Fy^a antigen.

The blood bank should be notified prior to delivery of a possible affected fetus so that fresh blood which is Fy(a−b−) or Fy(a−b+) is kept ready for possible exchange transfusion.

Summary

A case of hemolytic disease of the newborn due to anti-Fy^a (Duffy) requiring exchange transfusion is presented. To date, only 19 such cases have been reported with 32% requiring exchange transfusion and 16% resulting in neonatal death. Only two of the previous case reports describe the use of amniocentesis for the management of Duffy sensitization.

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Acknowledgments. We wish to thank Robert F. Reiss, M.D. (Director, Hudson Valley Blood Services) for his review of the manuscript; Sybil Gordon, Ronald Stackhouse, M.T., R.M.T and Sandra Wilczewski, M.T. (ASCP) for their expert technical assistance.

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[1]. Gordon, E.E. and Haas, A., Indust. Med. & Surg. 28:217, 1959. (See cases 2, 10, 15, 18, 35, 36 in Table I; cases 20 and 31 in Table II).

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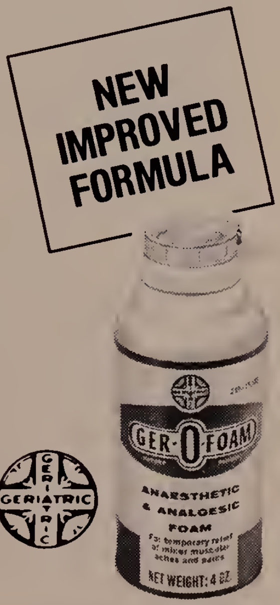

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DEVELOPERS AND SUPPLIERS OF CEVI-BID • GAYSAL-S • B-C-BID

William Charles Wells, M.D., F.R.S., 1757–1817

An American physician-scientist America almost forgot

HARRY BLOCH, M.D.
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Historians of medicine do not illuminate the lives of eighteenth-century conquerers of nature with the same glowing eloquence reserved for those of the seventeenth century. This is understandable. There were no equals to Galileo Galilei, William Harvey, or Isaac Newton in the eighteenth century. Illustrious scientists in both centuries, however, possessed a common quality-versatility. Newton was a mathematician, astronomer, chemist, optician, and mechanic. Wells, the subject of this essay, was distinguished in medicine, optics, meteorology, and biologic theory.

Wells has been mostly forgotten by historians, especially in America. Authors of medical history and science in the south, his birthplace, dismiss him with scant notice.[1,2] This inattention stirred a plea to collect his works "ere time effaces his name, lest America lose the honor of his genius." [3]

Medical Calling

Wells was an American who chose to live and work in England. His parents, fervent royalists, migrated in 1753 from Scotland to Charleston, South Carolina. He was reared as a royalist, but Wells was not a Tory guilty of anti-American action or slurs against his country. At 14 years of age, Wells was apprenticed to the eminent physician-naturalist Alexander Garden and served him for almost four years before leaving to complete his medical education in Europe. Wells received his medical degree in 1780 from Edinburgh and returned to Charleston; he left again in 1784 to permanently relocate in London.[4] Wells was appointed to Finsbury Dispensary in 1789 and to the St. Thomas Hospital in 1795. He was esteemed "a remarkable man" by the renowned anatomist and surgeon Sir Benjamin Brodie (1783–1862) and "one of the greatest men in our profession during the reign of George III" in an address before the Royal College of Physicians.[5]

Wells was curious, far-sighted, an exceptionally keen observer and recorder in the Hippocratic tradition, and, as evident from his experimental enquiries, an adherent of the philosophy of Sir Francis Bacon.[4] He wrote 18 scientific papers meticulously compiled in elegant English.[6] This essay will briefly summarize the principal achievements that assured him a place in the history of medicine and science.

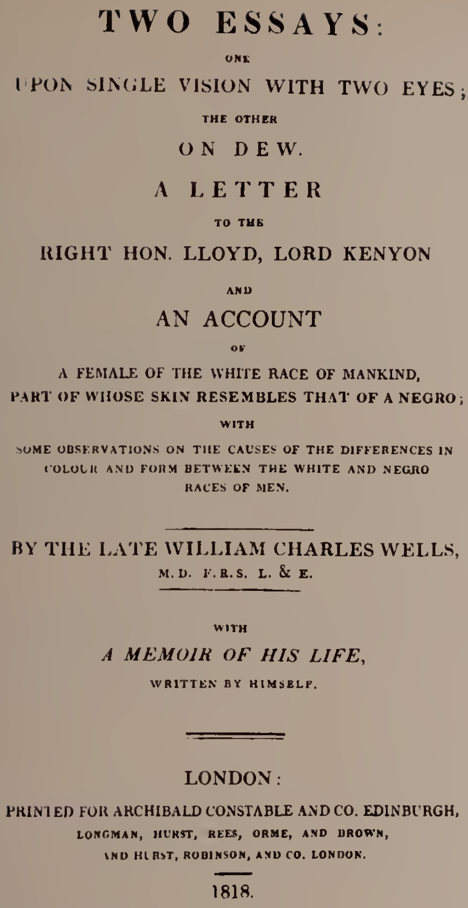
Dew formation

The first logical explanation of dew formation based on experiment and reason was reported by Wells in 1813; this research was regarded of such paramount importance by the Royal Society of London that he was awarded membership and the prestigious gold and silver Rumford medals.[7] His paper was praised as "original, exhaustive, and complete" [8] one of the finest achievements of inductive philosophy the world has ever seen"[9]; and "a specimen of inductive scientific thought and model of scientific method."[10]

The observations and experiments on dew formation were carried out in a suburban garden where he frequently spent the night despite illness and his age. Dew formation, Wells observed, was favored on clear, calm nights. The earth became colder and the surrounding air warmer, due to heat radiation from the earth's surface and to atmospheric water condensed on the grass. Dew production itself, he showed, generated heat, increased air temperature, and precipitated more dew and hoarfrost.[4,7,11]

Medical observations

Arthritis and gout were not differentiated in the early history of science. Thomas Sydenham (1624–1689), the first to separate them, ascribed exposure as the cause of arthritis.[6,12] In the eighteenth century, when postmortems became frequent, cardiac vascular lesions were noted, but their etiology was unknown. Mitral stenosis as a postmortem finding was reported by Raymond Vieussens (1641–1715) in 1705 and by Giovanni Battista Morgagni (1628–1771) in *De sidibus et causis morborum* in 1761.[12] John Abernethy (1764–1831) in 1806 and



TWO ESSAYS:
ONE
UPON SINGLE VISION WITH TWO EYES;
THE OTHER
ON DEW.
A LETTER
TO THE
RIGHT HON. LLOYD, LORD KENYON
AND
AN ACCOUNT
OF
A FEMALE OF THE WHITE RACE OF MANKIND,
PART OF WHOSE SKIN RESEMBLES THAT OF A NEGRO;
WITH
SOME OBSERVATIONS ON THE CAUSES OF THE DIFFERENCES IN
COLOUR AND FORM BETWEEN THE WHITE AND NEGRO
RACES OF MEN.

BY THE LATE WILLIAM CHARLES WELLS,
M.D. F.R.S. L. & E.

WITH
A MEMOIR OF HIS LIFE,
WRITTEN BY HIMSELF.

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1818.

Title page of *Two Essays: One Upon Single Vision With Two Eyes; the Other on Dew.*

David Dundas in 1808 described valvular pathology seen at autopsies of patients who had suffered rheumatic fever, but both failed to see any connection.[13] William Cullen (1710–1790) clearly described acute rheumatic articular disease, but did not relate it to cardiac disease.[6] William Pitcairn (1711–1791) is said to have thought there was a relationship as early as 1788, but it was Wells who finally proved their unequivocal association.[6,11]

His conceptualization crystallized from morbid anatomy and sensitive clinical observation without benefit of the stethoscope. Wells described (1810) heart complications of rheumatism, skin manifestations, and subcutaneous nodules. Jean Bouillaud (1797–1881), who had the advantage of the stethoscope, proclaimed the "Law of Coincidence" of pericarditis and endocarditis with acute articular rheumatism in 1836, which Wells had already associated 25 years earlier.[12,14]

Dropsy was identified with lymph and chyle vessel laceration until the discovery of blood circulation demonstrated the value of animal experimentation in the investigation of pathologic and physiologic processes. Richard Lower (1631–1691) subsequently ligated the jugular veins and inferior vena cava in animals and produced ascites and anasarca. Observing that edema fluid was free of blood, he correctly reasoned that with impeded blood flow serum separated and filtered through the vessel walls.[15] Stephen Hales (1677–1761), a century later, produced cachetic edema by pouring water into the blood stream of an animal.[15]

An achievement of pure clinical observation and logical reasoning was Wells's correlation of albumin in urine with dropsy.[11] His work was helpful to Richard Bright (1784–1858) at Guy's Hospital in London in relating glomerular nephritis found at autopsy with albuminuria and dropsy observed clinically (1827).[16]

Wells's contributions to optical science and his essay on single vision with two eyes (1792)[4] evoked the approbation that he was "one of the intellects of ophthalmology (see figure)." Wells described hyperopia, effects of belladonna on the refractive power of the eye, consensual pupillary reaction, and paralysis of accommodation.[3] It is not known whether or not Thomas Young, whose work on refractive error and astigmatism came a bit later, was familiar with Wells' work.

Biologic theory

A product of uncommon observational skill and superb inductive reasoning was evident in the biologic theory modestly read by Wells in 1813 before the Royal Society.[4,17] He expounded the view that in the struggle for existence man survived due to natural selection and favorable variations in simple characters, and that among men as well as among animals varieties of greater or lesser magnitude are constantly occurring. He envisioned the possibility that plants and animals had a long history, were once different from what they are now, and descended from earlier forms. After remarking that Negroes enjoy an immunity from certain tropical diseases, he contends that agriculturists improve their domesticated animals by selection and what is done in the latter case by art "seems to be done with equal efficacy, though more slowly, by nature in the formation of varieties of mankind better fitted for the countries they inhibit." [4] Wells states that of the accidental varieties of man in Africa, some better fitted to bear the diseases of the country would multiply while the others would decrease. The color of this vigorous race would be dark and become the only race in the country in which it originated.[4] This use of disease as a selective agent in the evolutionary process evolved most likely from observations in South Carolina where he noted differences in survival to decimating diseases among black slaves.

His recital did not startle any of the audience. It was speculative, and Wells himself failed to recognize its significance.[18] The essay was ignored until called to the attention of Charles Darwin (1809–1882). In a letter (October 1865), Darwin writes: "A Yankee has called my attention to a paper attached to Dr. Wells' famous 'Essay on Dew' in which he applies most distinctly the principle of natural selection in the races of man." [19]

In *On the Origin of the Species* Darwin states: "It occurred to me that Negro and other dark races might have acquired their darker tints by the darker individuals escaping from the deadly influence of the miasma of their native countries during a long series of generations. I afterwards found that the same idea had long ago occurred to Dr. Wells . . . in 'An Account of a White Female, part of whose skin resembled that of a Negro.' In this paper he distinctly recognizes the principle of natural selection . . . ." Darwin pronounced it "The most complete of all anticipations of his theory." [20]

Creation concept

Thus, Wells, who had resolved an observation of a pinto female into a theory of selection, variation, and origin of races of man, and perceived the similarity between artificial and natural selection, failed, however, to see the principal of unlimited deviation in time, the heart of Darwin's theory.[17,21] Wells had the concept of the creation of man by successive slow transformations, and felt that "mutability over long periods might cause slow disappearance of one fauna and rise of another, genetically related but continuing to diverge from the first." [22]

Darwin developed a complete concept that Wells partially anticipated. Darwin, nevertheless, gave generous praise and recognition to the man who modestly reached specific conclusions before he did.

Wells died at 60 years of age. On his tomb is chiselled his own epitaph, which synthesizes his life: "I had tried to extend the boundaries of knowledge."

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Acknowledgment. The author is indebted to Sallie Morgenstern, Curator, Rare Book Division, New York Academy of Medicine, and to Ellen Turner, Chief, Interlibrary Loan, Downstate Medical School, Brooklyn, New York, for invaluable assistance in locating references.

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Obituaries

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Arthur M. Dickinson, M.D., Delmar. Died August 26, 1982; age 89. Albany Medical College of Union University, 1915. Membership: Medical Society of the County of Albany; Medical Society of the State of New York.

Henry L. Dorfmann, M.D., New York City. Died September 12, 1982; age 76. Licentiate of the Royal College of Physicians of Edinburgh, 1932. Membership: New York Cardiological Society; American Thoracic Society; American Geriatrics Society; Fellow American College of Chest Physicians; Fellow American College of Cardiology; New York County Medical Society; Medical Society of the State of New York.

Alexander Fiala, M.D., Middle Village. Died August 5, 1982; age 70. Universita Karlova Fakulta Lekarska, Praha., 1946. Membership: American Thoracic Society; Fellow American College of Chest Physicians; Medical Society of the County of Queens; Medical Society of the State of New York.

Irvin M. Fradkin, M.D., Freeport. Died October 2, 1982; age 75. University of London Faculty of Medicine, 1935. Membership: American Academy of Pediatrics; Diplomate American Board of Pediatrics; Nassau County Medical Society; Medical Society of the State of New York.

Abraham N. Franzblau, M.D., New York City. Died October 28, 1982; age 81. University of Cincinnati College of Medicine, 1938. Membership: Academy of Medicine; American Psychiatric Association; American Geriatrics Society; Academy of Psychosomatic Medicine; New York County Medical Society; Medical Society of the State of New York.

Joseph A. Gaines, M.D., Seattle. Died September 21, 1982; age 77. Columbia University College of Physicians and Surgeons, 1929. Membership: Academy of Medicine; New York Obstetrical Society; American Fertility Society; Endocrine Society; Fellow American College of Surgeons; Diplomate American Board of Obstetrics and Gynecology; New York County Medical Society; Medical Society of the State of New York.

George L. Gilmore, M.D., Venice, Florida. Died August 25, 1982; age 61. Long Island College of Medicine, 1946. Membership: American Society of Anesthesiologists, Inc. Medical Society of the County of Monroe, Inc., Medical Society of the State of New York.

Joseph Hans, M.D., Julius-Maximilians-University Medicine, Fakultat, Wurzburg, Bavaria, 1926. Membership: New York Academy of Gastroenterology; Medical Society of the County of Queens; Medical Society of the State of New York.

John Clifford Hayner, M.D., New York City. Died June 2, 1981; age 88. New York Medical College, 1919. Membership: Bronx County Medical Society; Medical Society of the State of New York.

Max Helfand, M.D., New York City. Died September 25, 1982; age 85. Fordham University School of Medicine, 1921. Membership: American Psychiatric Association; Diplomate American Board of Psychiatry and Neurology; New York County Medical Society; Medical Society of the State of New York.

Harry L. Herman, M.D., Williamsville. Died September 3, 1982; age 82. Long Island College Hospital, 1925. Medical Society of the County of Kings; Medical Society of the State of New York.

Morton K. Hertz, M.D., New York City. Died September 7, 1982; age 85. Eclectic Medical College, Cincinnati, 1923. Membership: New York County Medical Society; Medical Societay of the State of New York.

L. Clovis B. Hirning, M.D., Katonah. Died September 8, 1982; age 76. Harvard Medical School, 1932. Membership: American Psychiatric Association; Academy of Psychoanalysis; Diplomate American Board of Psychiatry and Neurology; Westchester County Medical Society; Medical Society of the State of New York.

Frederick C. Hunt, M.D., New York City. Died March 19, 1982; age 83. University of Western Ontario, Canada, 1924. Membership: Academy of Medicine; Diplomate American Board of Pediatrics; New York County Medical Society; Medical Society of the State of New York.

Samuel Kalter, M.D., Berkeley, California. Died July 14, 1982; age 88. Ludwig-Maximilians University Medicine Fakultat, Munchen, Bavaria, 1924. Membership: Medical Society of the County of Orange; Medical Society of the State of New York.

Robert P. Kenna, M.D., Babylon. Died April 1, 1982; age 65. National University of Ireland, Ireland, 1954. Membership: Suffolk County Medical Society; Medical Society of the State of New York.

Sumner B. Kingsley, M.D., Ithaca. Died February 13, 1982; age 72. Washington University School of Medicine, St. Louis, Missouri, 1940. Membership: Medical Society of the County of Tompkins; Medical Society of the State of New York.

Manuel F. Kirschtein, M.D., New York City. Died April 7, 1982; age 55. Facultad Ciencias Medicas, Buenos Aires, 1953. Membership: Pan American Medical Association; Bronx County Medical Society; Medical Society of the State of New York.

Monroe M. Kissane, M.D., Malone. Died September 2, 1982; age 69. McGill University Faculty of Medicine, 1940. Membership: Franklin County Medical Society; Medical Society of the State of New York.

Walter Lentino, M.D., Middletown. Died June 11, 1982; age 57. New York Medical College, Flower and Fifth Avenue Hospitals, 1947. Membership: New York State Society of Internal Medicine; Society of Nuclear Medicine; Fellow American College of Gastroenterology; Diplomate American Board of Radiology; Diplomate American Board of Family Practice; Diplomate American Board of Internal Medicine; Medical Society of the County of Orange; Medical Society of the State of New York.

Dickinson Lipphard, M.D., Jamestown. Died March 15, 1982; age 62. University of Rochester School of Medicine, 1945. Membership: American Society of Clinical Pathologists; Diplomate American Board of Pathology; Medical Society of the County of Chautauqua; Medical Society of the State of New York.

Hyman Lockser, M.D., Bronx. Died March 25, 1982; age 75. Bellevue Hospital Medical College, 1932. Membership: American Geriatrics Society; American Academy of Family Physicians; Bronx County Medical Society; Medical Society of the State of New York.

Ronald L. Loeb, M.D., Canandaigua. Died August 22, 1982; age 70. Universita Degli Studi Di Genova, Facolta Di Medicina E Chirurgia, 1936. Membership: Ontario County Medical Society, Inc.; Medical Society of the State of New York.

Lazar C. Margulies, M.D., New York City. Died March 7, 1982; age 87. University of Vienna, Austria, 1921. Membership: American Fertility Society; Diplomate American Board of Obstetrics and Gynecology; New York County Medical Society; Medical Society of the State of New York.

Maureen D. McFadden, M.D., Stony Brook. Died October 2, 1982; age 43. Western Reserve University School of Medicine, 1965. Membership: American Rheumatism Association; Diplomate American Board of Internal Medicine; Suffolk County Medical Society; Medical Society of the State of New York.

David A. Meyer, M.D., Ft. Lauderdale, Florida. Died September 16, 1981; age 78. Long Island College Hospital, 1928. Membership: Diplomate American Board of Obstetrics and Gynecology; Medical Society of the County of Kings; Medical Society of the State of New York.

Marvin H. Milch, M.D., Buffalo. Died August 28, 1982; age 75. University of Buffalo School of Medicine, 1923. Membership: Medical Society of the County of Erie; Medical Society of the State of New York.

Francis J. Muller, M.D., Valley Stream. Died June 28, 1982; age 80. Georgetown University School of Medicine, 1930. Membership; Medical Society of the County of Queens; Medical Society of the State of New York.

Francis M. Murray, M.D., Skaneateles. Died August 18, 1982; age 47. New Jersey College of Medicine and Dentistry, 1960. Membership: Onondaga County Medical Society; Medical Society of the State of New York.

Julius G. Ottenheimer, M.D., New York City. Died September 24, 1982; age 82. Albert-Ludwigs-Univ. Med. Fakultat, Freiburg, Baden, 1925. Membership: New York Cardiological Society; New York State Society of Internal Medicine; American Geriatrics Society; Pan American Medical Association; Fellow American College of Cardiology; New York County Medical Society; Medical Society of the State of New York.

Russel H. Patterson, M.D., Sarasota, Florida. Died October 10, 1982; age 92. Harvard Medical School, 1918. Membership: Academy of Medicine; New York Gastroenterological Society; New York State Surgical Society; American Association For The Surgery of Trauma; American Academy of Compensation Medicine, Inc.; Fellow American College of Surgeons; Diplomate American Board of Surgery; New York County Medical Society; Medical Society of the State of New York.

Bernard S. Piskor, M.D., Syracuse. Died September 13, 1982; age 64. Long Island College of Medicine, 1944. Membership: Onondaga County Medical Society; Medical Society of the State of New York.

Allan Putterman, M.D., Richmond, Virginia. Died June 2, 1982; age 76. New York University College of Medicine, 1931. Membership: Academy of Medicine; Fellow American College of Obstetricians and Gynecologists; Diplomate American Board of Obstetrics and Gynecology; Medical Society of the County of Queens; Medical Society of the State of New York.

Jonas Reich, M.D., St. Augustine, Florida. Died August 26, 1982; age 86. Medizinische Fakultat Der Universitat, Wein, 1922. Membership: Medical Society of the County of Kings; Medical Society of the State of New York.

Vesta M. Rogers, M.D., Whitney Point. Died September 10, 1982; age 73. Columbia University College of Physicians and Surgeons, 1936. Membership: American Academy of Family Practice; American Society of Clinical Hypnosis; Medical Society of the County of Broome; Medical Society of the State of New York.

Herman Rothman, M.D., Eastchester. Died October 28, 1982; age 76. Cornell University Medical College, 1931. Membership: Academy of Medicine; New York Society of Internal Medicine; American Geriatrics Society; Fellow American College of Cardiology; Bronx County Medical Society; Medical Society of the State of New York.

Heinz Salm, M.D., Hudson. Died September 28, 1982; age 74. University Koln-Cologne-Medizinische Fakultat, Koln, Prussia, 1932. Membership: American Academy of Family Practice; American Geriatrics Society; Diplomate American Board of Family Practice; Columbia County Medical Society; Medical Society of the State of New York.

Keith M. Schneider, M.D., New Hyde Park. Died October 1, 1982; age 55. New York University College of Medicine, 1951. Membership: New York Pediatric Society; New York State Surgical Society; Academy of Medicine; American Academy of Pediatrics; Fellow American College of Surgeons; Diplomate American Board of Surgery; Nassau County Medical Society; Medical Society of the State of New York.

Oscar Schneller, M.D., Flushing. Died April 9, 1982; age 71. University of Vermont, 1936. Membership: New York Academy of Medicine; Diplomate American Board of Obstetrics and Gynecology; Medical Society of the County of Queens; Medical Society of the State of New York.

Herbert E. Schoen, M.D., Staten Island. Died September 30, 1982; age 78. Licentiate of the Royal College of Physicians of Edinburgh, 1934. Membership: American Academy of Family Practice; Richmond County Medical Society; Medical Society of the State of New York.

Winfield W. Scott, M.D., Rochester. Died October 1, 1982; age 91. Johns Hopkins University School of Medicine, 1921. Membership: Academy of Medicine; American Association of Genito-Urinary Surgeons; American Urological Association; Fellow American College of Surgeons; Diplomate American Board of Urology; Medical Society of the County of Monroe; Medical Society of the State of New York.

Bernard B. Siegel, M.D., Lawrence. Died October 10, 1982; age 64. State University of New York Downstate Medical Center, 1943. Membership: New York Society of Internal Medicine; American Academy of Allergy; American Association of Immunologists; Fellow American College of Allergists; Diplomate American Board of Anesthesiology; Medical Society of the County of Queens; Medical Society of the State of New York.

Jacques D. Soifer, M.D., Brooklyn. Died September 2, 1982; age 83. Yale University School of Medicine, 1924. Membership: Fellow American College of Obstetricians and Gynecologists; Qualified Fellow International College of Surgeons; Diplomate American Board of Obstetrics and Gynecology; Medical Society of the County of Kings; Medical Society of the State of New York.

James Edward Stack, M.D., Woodhaven. Died January 29, 1982; age 84. Long Island Medical College, 1922. Membership: American Academy of Otolaryngology; Diplomate American Board of Otolaryngology; Medical Society of the County of Queens; Medical Society of the State of New York.

James K. Tompkins, M.D., Endicott. Died April 13, 1982; age 60. Duke University School of Medicine, 1949. Membership: American Academy of Dermatology; Diplomate American Board of Dermatology, Inc.; Broome County Medical Society; Medical Society of the State of New York.

Betty L. Voelker, M.D., Glen Falls. Died August 21, 1982; age 60. Marquette University School of Medicine, 1949. Membership: Academy of Medicine; American Academy of Family Practice; American Geriatrics Society; Diplomate American Board of Family Practice; Medical Society of the County of Warren; Medical Society of the State of New York.

Philip M. Wald, M.D., New York City. Died September 14, 1982; age 53. Universita Degli Studi Di Bologna, Facolta Di Medicina E Chirurgia, 1968. Membership: Diplomate American Board of Obstetrics and Gynecology; New York County Medical Society; Medical Society of the State of New York.

Robert L. Walker, M.D., Syracuse. Died May 16, 1982; age 64. Long Island College of Medicine, 1948. Membership: American Occupational Medical Association; Onondaga County Medical Society; Medical Society of the State of New York.

Louis Wardell, M.D., Weston, Connecticut. Died October 6, 1982; age 81. Medical College of Virginia, Richmond, 1926. Membership: New York County Medical Society; Medical Society of the State of New York.

Maurice Weinrib, M.D., Bergenfield. Died August 2, 1982; age 83. Long Island College Hospital, 1923. Membership: Bronx County Medical Society; Medical Society of the State of New York.

Hans D. Weiss, M.D., Newtonville. Died March 17, 1982; age 73. University of Berne Switzerland, 1937. Membership: American Geriatrics Society; Medical Society of the County of Albany; Medical Society of the State of New York.

George C. Whitney, M.D., Geneva. Died September 29, 1982; age 69. University of Rochester School of Medicine and Dentistry, 1939. Membership: Academy of Medicine; American Thoracic Society; Ontario County Medical Society; Medical Society of the State of New York.

Maurice L. Woodhull, M.D., Scarsdale. Died March 16, 1982; age 74. University of Kansas School of Medicine, 1935. Membership: American Academy of Family Physicians; Medical Society of the County of Westchester; Medical Society of the State of New York.

Dominick A. Zurlo, M.D., Glen Falls. Died September 20, 1982; age 73. New York Medical College, Flower and Fifth Avenue Hospitals, 1934. Membership: Academy of Medicine; Fellow American College of Surgeons; Medical Society of the County of Warren; Medical Society of the State of New York.

(*continued from page 202*)

asphyxia had growth hormone levels that were often 2.5 ng/mL or less. All infants with growth hormone levels 2.5 ng/mL or less died. However, no infant with chronic intrauterine stress had growth hormone levels 2.5 ng/mL or less. These data support the concept that severe insult may shut off growth hormone secretion as in hypopituitarism and chronic stress may increase growth hormone secretion.

Mettlin C, Cookfair DL, Lane W, Pickren J: Cancer patients' quality of Life: assessment of an approved program. ***New York State J Med 1983;*** 83:187–193.

Cancer patients sometimes face a variety of social and vocational problems as a result of their disease. Little quantitative data exist on the quality of life among these patients. Self-reported assessments of impairment, employability and nursing care needs have been collected for 1,902 cancer patients seen at Roswell Park Memorial Institute over the last decade. Variation in levels reported have been examined according to sex, age, diagnosis, stage at diagnosis, length of survival, types of treatment, and current disease status. Age, stage at diagnosis, diagnosis and current disease status were found to be associated with self-reported quality of life. Treatment by surgery only was associated with the lowest levels of impairment and nursing care needs and highest employability of any treatment type. No significant variation in quality of life was observed by length of survival. Females were less likely to report impairment than males, but there were no other differences observed with regard to sex. Levels of impairment observed were compared to similar information from a survey of the US population. Former cancer patients report slightly greater impairment than the general population. This type of data may be used to identify patients in need of rehabilitative services and to determine what type of services are most appropriate. It may also provide insight into the impact of modern treatment practices on quality of life for these patients.

Siegel JH, Yatto RP: Transduodenal endoscopic decompression of obstructed bile ducts. ***New York State J Med 1983;*** 83:203–205.

Nonoperative decompression procedures for bile duct obstruction are used for preoperative management or for palliation in patients who are surgically unresectable. In the present report, an endoprosthesis was placed transduodenally via the papilla of Vater in 48 patients with obstructive jaundice. Complications were limited to infection in three patients and malfunction of the endoprosthesis in three which were readily corrected at follow-up endoscopy. The transduodenal approach for decompression is a safe, effective alternative in the management of biliary obstruction.

Reinfeld H, Louis S: Unilateral asterixis: clinical significance of the sign. ***New York State J Med 1983;*** 83: 206–208.

Bilateral asterixis is an indicator of metabolic disorder of the central nervous system. Unilateral asterixis indicates a focal lesion in the contralateral hemisphere. Asterixis may be seen in the upper extremity, the lower extremity, or the face. In this article we present two cases of unilateral asterixis resulting from brain tumor and discuss 37 cases from the literature.

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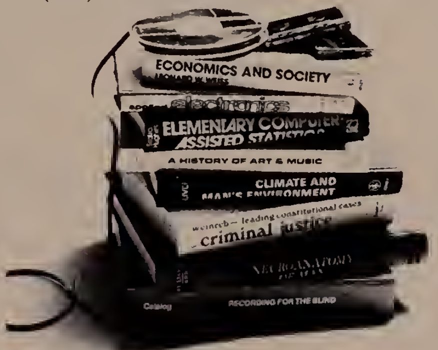

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CME 83

MEDICAL PRACTICE IN THE NUCLEAR AGE

These Professors and other outstanding speakers will be at the Medical Society of the State of New York's 1983 Annual CME Assembly, May 13–15, at the Rye Town Hilton.

* * *

Harold L. Atkins, M.D.

Professor of Radiology and Director of Nuclear Medicine, State University of New at Stony Brook. *Annihilation, Coincidences and Scintillation: The Application of Nuclear Energy to the Diagnostic Process*

Victor P. Bond, M.D.

Associate Director for Life Sciences and Safety, Brookhaven National Laboratories, Upton. Professor of Medicine, State University of New York at Stony Brook. *Health Effects of Low Level Ionizing Radiation*

Alexander Leaf, M.D.

Chairman, Department of Preventive Medicine and Clinical Epidemiology and Ridley Watts Professor of Preventive Medicine, Harvard Medical School, Boston, Massachusetts

Francis L'esperance, M.D.

Associate Professor of Clinical Ophthalmology, Columbia University College of Physicians and Surgeons, New York City. *Ophthalmic Lasers: Instrumentation and Applications*

Richard Satran, M.D.

Professor of Neurology, University of Rochester School of Medicine and Dentistry, Rochester. *Vascular Headache: Migraine and Cluster Headache Syndromes*

Bennett M. Stein, M.D.

Byron Stookey Professor of Neurological Surgery, Columbia University College of Physicians and Surgeons; Director of Neurological Surgery, Columbia-Presbyterian Medical Center, New York City. *Surgical Treatment of Medial Hemispheric AVM's* (*Arterio Venous Malformations*)

Joseph P. Whalen, M.D.

Professor and Chairman, Department of Radiology, Cornell University Medical College; Radiologist and Chief, The New York Hospital, Cornell Medical Center, New York City. *Computerized Tomography of the Chest*

Lawrence A. Yannuzzi, M.D.

Surgeon Director in Ophthalmology, Manhattan Eye, Ear and Throat Hospital; Associate Clinical Professor of Ophthalmology, Cornell Medical School, New York City. *Krypton Laser Photocoagulation for Retino-Vascular and Macular Diseases*

* * *

A highlight of the Assembly will be the General Session entitled "Medical Implications of the Nuclear Age". The 2½ days of Scientific Meetings will provide the individual physician with 18 credits out of a total of 75 Category I CME Credits being offered. Over 100 outstanding speakers, including 20 from out of state, will present papers at 26 sessions. Also, each program is acceptable for prescribed or personal interest credits by the American Academy of Family Physicians. See this issue of the Journal for the pre-registration form.

SCHEDULE OF SCIENTIFIC MEETINGS

1983 ANNUAL CME ASSEMBLY

Medical Society of the State of New York
Rye Town Hilton, Port Chester, New York

FRIDAY, MAY 13

Morning: 9–12 GENERAL SESSION—"MEDICAL IMPLICATIONS OF THE NUCLEAR AGE".

Afternoon:
- Chest Diseases
- Dermatology & Syphilology
- Gastroenterology & Colon & Rectal Surgery/Radiology
- Medical Legal & Workers' Compensation/Occupational Medicine
- Neurology

SATURDAY, MAY 14

Morning:
- Cardiovascular Diseases
- Emergency Medicine/Anesthesiology/Psychiatry/Preventive Medicine/Family Practice
- Internal Medicine/Hand Surgery
- Neurosurgery
- Ophthalmology
- Surgery
- Urology/Radiology

Afternoon:
- Emergency Medicine/Anesthesiology/Psychiatry/Preventive Medicine/Family Practice (*cont'd*)
- Internal Medicine/Hand Surgery (*cont'd*)
- Ophthalmology (*cont'd*)
- Otolaryngology—Head & Neck Surgery
- Medical Liability Mutual Insurance Co. & MSSNY
- Pathology
- School Health/Orthopedic Surgery

SUNDAY, MAY 15

Morning:
- Allergy & Immunology
- Obstetrics & Gynecology/Pediatrics
- Plastic, Reconstructive, and Maxillofacial Surgery
- Physical Medicine & Rehabilitation
- Women's Medical Society of New York State

■

CME CREDITS: Each program will be eligible for CME Catogory 1 credits on an hour-for-hour basis.

■

TECHNICAL EXHIBITS

THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

Annual CME Assembly

Friday, May 13—Sunday, May 15, 1983

Medical Practice in the Nuclear Age

All physicians are invited to attend our Annual Continuing Medical Education Program to be held at the Rye Town Hilton. You will have the opportunity to acquire Category I CME Credits during 2½ days of outstanding General Sessions, Symposia, and Panel Discussions. Highlighting the Assembly, will be the General Session entitled "Medical Implications of the Nuclear Age." Our meetings are designed to inform the physician of the latest developments not only in ones' specialty, but in other areas of medicine as well.

Each morning before the meetings begin, registrants will have the opportunity to converse with their colleagues over coffee and Danish—compliments of the Medical Society of the State of New York. There will be Technical Exhibits on display to acquaint the physician with new products and services that will help in providing better medical care. Come join your friends and colleagues in a relaxed setting.

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Port Chester, N.Y. 10573

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DOUBLE/TWIN:	$87	$92	$97	$102	$107
SUITES:	$185 and up				

MEDICAL SOCIETY OF THE
STATE OF NEW YORK
1983 CME ASSEMBLY
MAY 13–15, 1983
SUITES ON REQUEST TO HOTEL

☐ CONFIRMATION REQUESTED
If two or more to occupy room, name of joiner(s)

____

If a range of rates is offered and the rate requested is not available, the next available rate will be assigned. Reservation requests must be received no later than April 20, 1983, and will be held until 6:00 p.m. on the date of arrival unless otherwise specified.

If reservations are made by telephone, you must identify the Medical Society meeting for the special rate to apply. Rates subject to applicable sales tax

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Physicians must make their own hotel reservations no later than April 20, 1983. If making reservations by telephone, please identify the Medical Society meeting for special rate to apply.

AMPLE PARKING

TRANSPORTATION

Convenient regularly scheduled ground transportation is available from LaGuardia and Kennedy Airports. On arrival, go to the baggage claim area and look for Airport Transportation Services free courtesy phone (it's red). From airports, service is throughout the day and evening with departures every hour (½ hour service during peak travel times). Last departure leaves Kennedy at 11:30 p.m. and LaGuardia at 11:45 p.m. Current one-way fare: $11.00; round trip fare: $21.00.

By train from Manhattan (Grand Central Station), take the New Haven line to Rye, New York (about 45 minutes). From the Rye Station, it is a 5 minute taxi ride to the Rye Town Hilton.

FRIDAY RECEPTION

A reception for member physicians, spouses, and exhibitors will be held from 6:00 p.m. to 7:00 p.m. Compliments of the Medical Society of the State of New York.

SATURDAY RECEPTION & DINNER DANCE

All physicians and their guests are invited to attend the Medical Society dinner dance on Saturday, May 14th. An outstanding guest speaker is scheduled to appear. A reception sponsored by the Medical Society of the State of New York will

begin at 7:00 p.m. Dinner will be served at 8:00 p.m. $40.00 per person.

MEETING HOURS

Friday, May 13: 9:00 a.m.–5:00 p.m.

Saturday, May 14: 9:00 a.m.–5:00 p.m.

Sunday, May 15: 9:00 a.m.–1:00 p.m.

EXHIBIT HOURS

Friday, May 13: 8:30 a.m.–5:00 p.m.

Saturday, May 14: 8:30 a.m.–5:00 p.m.

Sunday, May 15: 8:30 a.m.–1:00 p.m.

INTERMISSIONS

Coffee & Danish, compliments of MSSNY, will be served each morning from 8:00 a.m. to 8:45 a.m. There will be morning and afternoon intermissions for coffee, and to allow time to visit the exhibits.

REGISTRATION

Registration is open to MSSNY members and their guests, nonmember physicians, medical students, and members of the allied professions. There is no registration fee. Registration hours will be: Thursday, May 12 from 4:00 p.m.–7:00 p.m.; Friday, May 13 from 8:00 a.m.–5:00 p.m.; Saturday, May 14 from 8:00 a.m.–5:00 p.m.; Sunday, May 15 from 8:00 a.m.–12:30 p.m. All meetings and exhibits will close at 1:00 p.m. on Sunday.

PRE-REGISTRATION—Your badge and dinner tickets will be held at the MSSNY Registration Desk in the Grand Ballroom.

PRE-REGISTRATION FORM

1983 Annual CME Assembly, May 13–15
RYE TOWN HILTON

Complete and mail this form to the Medical Society address as indicated below.

(please print)

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Name____
(last) (first) (Initial)

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Member of MSSNY: Yes________No________Specialty________________

Note: There is no registration fee.

Saturday Reception & Dinner/Dance________tickets @ $40.00. Total__________

Please make checks payable to: Medical Society of the State of New York, clip and mail to Division of Advertising & Meeting Services, Medical Society of the State of New York, 420 Lakeville Rd., P.O. Box 5404, Lake Success, New York 11042.

Directions to the Rye Town Hilton

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from major New York Metropolitan Airports

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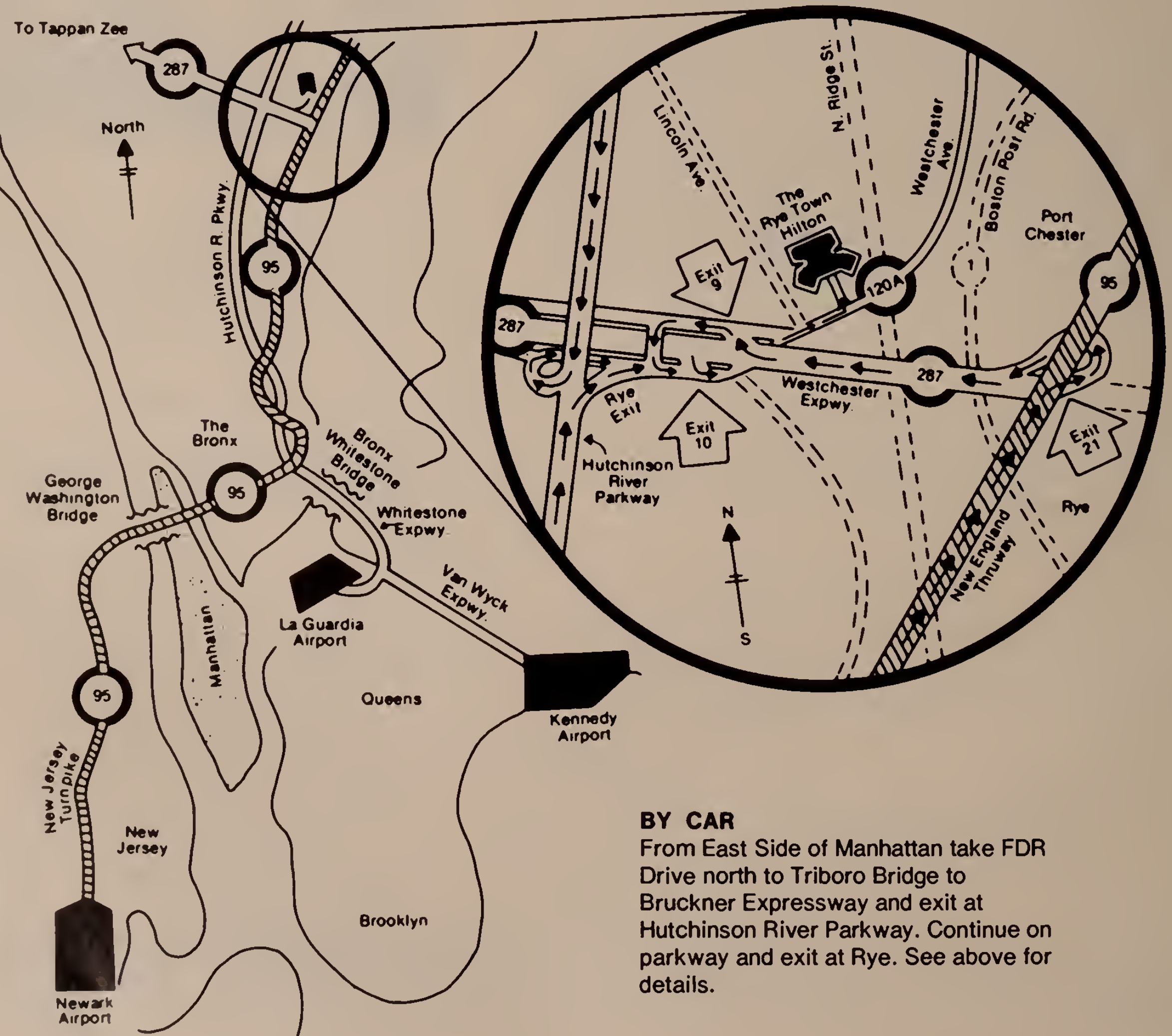
Take the Whitestone Expressway over the Bronx-Whitestone Bridge. Follow signs to Hutchinson River Parkway. Proceed on Hutchinson River Parkway to the Rye Exit to Westchester Ave. (120A). Proceed east on Westchester Ave. following signs to Port Chester. Turn left at Rye Town Hilton entrance (at stop light).

FROM KENNEDY AIRPORT

Take Van Wyck Expressway to Whitestone Expressway. Proceed on Whitestone Expressway over the Bronx-Whitestone Bridge. Follow signs to Hutchinson River Parkway. Proceed on Hutchinson River Parkway to the Rye Exit to Westchester Ave. (120A). Proceed east on Westchester Ave., following signs to Port Chester. Turn left at Rye Town Hilton entrance (at stop light).

FROM NEWARK AIRPORT

Take New Jersey Turnpike (95) to the George Washington Bridge. Proceed on U.S. 95 to Cross Westchester Expressway Exit 21. Proceed west on Cross Westchester Expressway (287) to Exit 9. Turn left at first traffic light onto Kennilworth Road. Turn left immediately at second traffic light onto Westchester Ave. (120A). Proceed east on Westchester Ave., following signs to Port Chester. Turn left at Rye Town Hilton entrance (at stop light).



BY CAR

From East Side of Manhattan take FDR Drive north to Triboro Bridge to Bruckner Expressway and exit at Hutchinson River Parkway. Continue on parkway and exit at Rye. See above for details.

MISCELLANEOUS

TAX ATTORNEY & PENSION PLAN SPECIALIST—Former IRS Pension Plan Specialist and Revenue Agent—Professional Incorporation, Pension and Profit Sharing Plan annual administration including initial IRS qualification, annual filings, actuarial certification and employee statements of participation—No Insurance Required—References upon request—Jack Wachstock, P.C., 300 Garden City Plaza, Garden City, N.Y. 11530. (516) 294-9470.

ALCOHOLISM, DRUG ADDICTION, SMOKING. New effective method. For information or consultation call: Adam Lewenberg, M.D., 420 E. 51st Street, N.Y. 10022, (212) 688-0813 or (212) 671-6100.

PHYSICIANS SIGNATURE LOANS TO $50,000. Take up to 7 years to repay with no pre-payment penalties. Competitive fixed rate, with no points, fees or charges of any kind. Use for taxes, investment, consolidation or any other purpose. Prompt, courteous service. Physicians Service Association, Atlanta, GA. Serving MDs for over 10 years. Toll-free (800) 241-6905.

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TAX ACCOUNTANT-ATTORNEY, formerly with I.R.S., announces his availability for taxes, accounting, all P.C. matters, and pensions. I have other doctor clients. Reasonable fees. Gerald Goldberg (212) 347-4256.

ATTORNEY TO THE HEALTH PROFESSIONS—Twenty three years representation of health professionals in administrative and disciplinary proceedings before State Education Department, Board of Regents, Department of Health and other regulatory agencies: civil and criminal proceedings, and in all business and legal transactions. Trustee and Overseer, Arnold and Marie Schwartz College of Pharmacy, Adjunct Professor of Pharmacy Law, Judge, Village of East Hills, Past President of Nassau County Magistrate's Association, Counsel for and Fellow of New York Academy of Pharmacy, lecturer and writer on Health Law; B.S. Brooklyn College of Pharmacy (1953), New York University School of Law, L.L.B. (1959 and L.L.M. (1962). Arthur Irwin Goldberg, Esq., Jacobson and Goldberg, 591 Stewart Avenue, Garden City, New York 11530, (516) 222-2330, (212) 895-1329.

ROBERT S. ASHER, ATTORNEY AT LAW—Former Director of Professional Conduct, N.Y.S. Board of Regents—Concentrating on all areas of professional practice, including Disciplinary and Narcotic Violation proceedings, Medicaid, Medicare and representation before government agencies. Dochter & Asher, 220 E. 42nd Street, New York, New York 10017 (212) 922-1900.

PERSONAL RECORDS SERVICE. Are your personal records seriously ill? PRS has the remedy. Organization of stock market transactions; personal check book; tax deduction schedules; all miscellaneous records. Call for phone consultation. (212) 989-3199.

SUMMER CME CRUISE/CONFERENCES on Legal-Medical issues—Alaskan, Caribbean, Mediterranean. 10 & 14 days in July and August. Approved for 24 CME Cat. 1 credits (AMA/PRA). Distinguished professors. Fly roundtrip free on Caribbean and Alaskan cruises. Excellent group fares on finest ships. Registration limited. Scheduled prior to 12/31/80—Tax deductible under 1976 Tax Reform Act. Information: International Conferences, 189 Lodge Ave., Huntington Station, N.Y. 11746. (516) 549-0869.

COLLECTIONS—HARD TO COLLECT and past due accounts successfully and tactfully collected by experienced attorney. Call or write for additional information: Edward D. Gewirtz, Attorney-at-Law, 123 Grove Avenue—Suite 204, Cedarhurst, New York 11516. (516) 295-1202 or (212) 471-4044.

HOLTER MONITOR SCANNING SERVICE. High quality, prompt service. First cassette free. $35 for 24-hr. scan. Three-year lease available on Holter Monitors. Call for information and free mailers. DCG interpretation, (313) 879-8860.

ACUPUNCTURE CERTIFICATION PROGRAMS. Two-week intensives in Cancun, Mexico (March 11-25) and Roscoe, New York (June 11-25). Approved for certification by NYS Board for Medicine. Conducted by Dr. Ralph Alan Dale. Contact: The Acupuncture Education Center, 13757 NE 3rd Ct., #210A, N. Miami, FL. 33161. (305) 891-0062 or 891-7333.

PRACTICES AVAILABLE

INTERNAL MEDICINE—CARDIOLOGY practice. Established 36 years. Rockville Centre, L.I., near hospitals. (516) 678-1369, (516) 766-0655.

HOUSE/OFFICE COMBINATION available now with active practice. Retiring from general medical practice after 35 years same location North Shore Long Island. Will help finance. For further information call after 6:30 pm (516) 627-6569.

OPHTHALMOLOGY PRACTICE FOR SALE, Eastern Nassau County, centrally located, established 28 years, retiring. Reply Dept. 276, c/o NYSJM.

The Departments of Medicine
and Obstetrics and Gynecology
and
The Page and William Black
Post-Graduate School of Medicine of the
Mount Sinai School of Medicine (CUNY)
Announce a Postgraduate Course

INTRAPERITONEAL ENDOSCOPY, PERITONEOSCOPY - LAPAROSCOPY

Under the Direction of MICHAEL BAYER, M.D. AND MARTIN S. GOLDSTEIN, M.D. and Guest Faculty and Faculty of the Mount Sinai School of Medicine.

SATURDAY, APRIL 23, 1983

Fee: $150—Practicing physicians; $75—Residents and fellows (including luncheon) . . Saturday, 9:00 A.M. to 5:00 P.M.

This course will discuss pertinent aspects of interperitoneal endoscopy as applicable to the practice of Gynecology, Gastroenterology and Surgery. The content will also be useful to Oncologists and Internists. The practical and clinical aspects of Laparoscopy will be emphasized.

APPLY TO: Director, The Page and William Black Post-Graduate School of Medicine, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, N.Y. 10029. Tel.: (212) 650-6737.

PHYSICIANS WANTED

SOUTH FLORIDA: INA HEALTHPLAN seeks Board Certified/Eligible physicians in family practice and most specialties. Opportunities are available in Miami and Ft. Lauderdale. Sophisticated practice atmosphere, emphasizing quality patient care and minimizing business responsibilities. Comprehensive salary and benefits package. For more information, send your C.V. to: Joan Harris, Professional Resources Manager, 560 N.W. 165th Street Road, Miami, FL 33169. Tel. (305) 944-4433.

GROW WITH US IN THE SUNBELT—The INA Healthplan needs physicians in family practice and most specialties in Miami, Tampa, Dallas, Houston, Phoenix, Tucson and Los Angeles. Attractive salaries and comprehensive benefits including professional development, retirement and profit sharing programs are provided. If team interaction and casual living interest you, send a brief CV to Medical Administration, INA Healthplan, Inc., 7616 LBJ Freeway, Suite 303, Dallas, Texas 75251.

DERMATOLOGIST, OPHTHALMOLOGIST, Otolaryngologist, and family physician needed: 50 miles north N.Y.C. Modern professional building. Heat, a/c inc. Space can be altered to suit need. Contact Dr. B. Poritzky, 22 Putnam Professional Park, Mahopac, N.Y. 10541. Tel. (914) 628-8454 or (914) 628-3473.

Research Project in

The Treatment of Trigeminal Neuralgia With Chinese Acupuncture Techniques

Any doctor who can refer trigeminal neuralgia patients for whom medications and surgery have brought no significant improvement, please contact:

Ling Sun Chu, M.D.
107 East 73rd St., New York, N.Y. 10021
(212) 472-3000

Acupuncture treatments will be free of charge to the patient if patient brings letter from referring physician that: 1) Contains patient's medical records. 2) Stating that: a) Referring physician agrees to participate in project, by evaluating the effects of the treatment on patient. b) Patient will remain under referring physician's care. Call or write for further details.

NEEMA EMERGENCY MEDICAL

—a professional association—

Emergency Medicine Positions—available with emergency physician group in PA, NY, NJ, VA, WVA, MD, KY and throughout New England, the Southeast, the Midwest, including all suburban, rural and metropolitan areas. Fee-for-service with minimum guarantee provided. Malpractice paid. Practice credits toward board certification. Physician department directors also desired. Please send resume to: NEEMA Emergency Medical, Suite 400, 399 Market Street, Phila., PA 19106 or phone 215-925-3511 in PA, or 800-523-0776 outside PA.

PHYSICIANS WANTED—CONT'D

PHYSICIAN DURING JULY AND AUGUST 1983 for children's camp located at Beach Lake, Pa., accommodates 350 campers, age 6–16; complete modern Health Center; 2 R.N.'s in attendance; will accept one M.D. for each month; no children accepted who are of camp age. Camp opens June 29 and closes August 23. Private room and facilities. Write (and include your phone number) to Trail's End Camp, c/o Beach Lake, Inc., 215 Adams Street, Brooklyn, N. Y. 11201.

PHYSICIANS NEEDED FOR 75 SUMMER children's camps located in the Northeast July and August or a single month. Contact: Association of Independent Camps (M) 157 West 57th Street, New York, N. Y. 10019. (212) 582-3540.

OB/GYN—BOARD CERTIFIED/ELIGIBLE, for established hospital based multispecialty group in beautiful Catskill mountain area of upstate New York. Negotiable salary with excellent fringe benefits including malpractice coverage and assistance with relocation expenses. Group employs a certified nurse/midwife. Position immediately available. Send c.v. to Thomas E. Lavell, M.D., Delaware Valley Hospital, 1 Titus Place, Walton, N.Y. 13856. (607) 865-6526.

FAMILY PRACTICE, INTERNAL MEDICINE, OB/GYN, general and orthopedic surgery, ent, radiology, psychiatry, ophthalmology wanted to join stimulating prepaid practice in Dallas, Texas—a cosmopolitan city whose climate and economy shines. Established physician group enjoys competitive salaries and comprehensive benefits while practicing in excellent facilities, free from office management. For further information, send C.V. to: Medical Director NYJ, INA Healthplan of Texas, 8131 L.B.J., Suite 350, Dallas, TX 75251, (214) 669-8069.

SURGICAL RESIDENCY PROGRAM DIRECTOR. Teaching position available for a Director of Surgical Education and Training at a large dynamic and active teaching community hospital. Major affiliate of the College of Medicine, Upstate Medical Center, State University of New York. Combined academic and practice opportunity. Competitive remuneration. Contact: Arthur A. Vercillo, M.D., Chief of Surgery, Department of Medical Education, St. Joseph's Hospital Health Center, 301 Prospect Avenue, Syracuse, NY 13203. We are an equal opportunity employer. (315) 424-5537.

ANESTHESIOLOGIST: Board certified or eligible; experience in invasive monitoring; to join congenial 3 man group corporate practice in progressive 270 bed hospital in suburban New York, 55 miles from NYC. Good schools—attractive community. Send C.V. with first letter. Reply to Dept. 275, c/o NYSJM.

TEXAS NEEDS DOCTORS. Immediate openings for family physicians, emer. room, gen. surgeon, internists, neurologist, ob/gyn, ophthalmologist, orthopods, ent., and pedis in Dallas and other cities/towns throughout the state. Group or solo opportunities with generous guarantees where they need additional physicians, and other physicians will give you referrals. Vacancies available because of retirement. No state income or corporate taxes in Texas. No fee. Contact Texas Doctors Group, Box 177, Austin, Texas 78767. (512) 476-7129.

PHYSICIAN—FULL AND PART-TIME positions available in neighborhood Health Centers of the Erie County Health Department. An Equal Opportunity Employer. Candidates must be licensed to practice medicine in NYS and must be board certified or board eligible in Family Practice or Internal Medicine. Send resume to: Personnel Office, Room 900, Erie County Health Department, 95 Franklin Street, Buffalo, NY 14202.

PRACTICES WANTED

GENERAL PRACTITIONER wants to relocate and buy a viable general practice in Nassau County or western Suffolk County. Reply Dept. 257, c/o NYSJM.

OPHTHALMOLOGIST, BOARD CERTIFIED desires to purchase practice in the New York City or suburban area. Confidence Maintained. Please contact Dept. 168, c/o NYSJM.

Qualified Medical Assistant And Medical Secretary Graduates Available

No Charge For This Service

Nassau School For Medical And Dental Assistants

W. Hempstead **(516) 483-0577**

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MANHATTAN'S EAST SIDE, 133 EAST 73RD ST., N.Y.C. LEXINGTON Professional Center, Inc. Part time & full time medical, dental, psychiatric office suites. Furnished & equipped. 24 hour answering service; receptionist. Mail service; cleaning. X-ray & clinical laboratory on premises. No leases necessary. Rent by the hour or full-time. (212) 861-9000.

IF YOU OWN A MEDICAL BUILDING conversion to Professional Condominium gives you tremendous after-tax profits while controlling ownership of your office location. Learn how you can profit from our concept. Contact: Paul Gellert, Gelco Associates, 155 West 68th Street, New York, N.Y. 10023. Phone: (212) 223-1130.

ASSOCIATES IN MEDICINE, FAMILY PRACTICE, pediatrics, etc., to share new professional building in Litchfield, Conn. We have a catchment population of about 20,000 people, and presently only one medical man here with hospital privileges. Excellent opportunity for any practitioner who desires a fast start. Please contact Dr. George Carofino (203) 567-9488 or (203) 482-9481.

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MANHATTAN DOCTOR'S OFFICE near Mt. Sinai and St. Luke's Hospitals and Columbia University. 110 Street near Riverside Drive. Available after 20 years of occupancy. Ground floor front. Approximately 650 square feet. Luxurious, high-rise residential building with 24-hour doorman. Call weekdays, 9am–1pm, (212) 222-0309.

HILTON HEAD, S.C.—3 bedroom furnished Condo on Ocean with two balconies, available for one week April 2, 1983–April 9, 1983. Tennis courts and pools no charge—golf courses available. Interested individuals only. Price $850.00. Call (212) 822-1152, M-W-F between 2 & 3 p.m. or write Dept. 274, c/o NYSJM.

OFFICE FOR SALE—The Ardsley, CPW-Park Views. 650 sq. ft. Maintenance $280. Interim financing. Asking $120,000. Dr. Beach (212) 466-4869.

WESTCHESTER—PROFESSIONALLY IDEAL. Separate office entrance, Three Bedroom Ranch with room for expansion. Located in Port Chester, New York, near Platinum Mile Corporates, Rye Town Hilton. Easy access to schools, shopping, parkways and airport. 38 minutes to New York City. Aurora Mascia, Real Estate 914-939-2553.

ORIGINAL OWNER, CUSTOM BUILT, two story colonial/adjacent office wing on 3/4 acres. "Move-in" condition. Ideal professional Long Island location. Accessible all major parkways. Asking $290,000. Flexible financing to qualified buyer. Evenings (516) 593-5551.

EAST SIDE RENTAL, MANHATTAN. "Store". Principals only, phone between four and six P.M. (212) 288-0043.

MAINE ISLAND PARADISE OF ACADIA National Park, charming comfortable 4 bedroom house, country kitchen, gardens, privacy or sociability in friendly village; excellent sailing, bicycling, hiking nearby Mount Desert mountains, June, August, September; Dr. H. Hellman, 61 Jane Street, New York City 10014 or (212) 675-8759.

FOR RENT—HUNTINGTON, LONG ISLAND. 950 sq. feet in prestige medical building on Route 25A in the village. Attractively decorated for medical use, move in condition. Take over lease at $10.50 per sq. foot including utilities. (516) 427-1897.

SOUTHHAMPTON COVE (SOUTHHAMPTON, L.I.) on the water. 5 bedroom Hi-Ranch, 2 floors, 2 bathrooms, 2 living rooms, huge family room with cathedral ceiling, skylights, sliding glass doors leading to deck. Furnished. Complete house from June 30–September 5; $15,000. House could also be divided into 2 separate apts. and rented separately. Call (212) 352-9494 or (212) 352-2764.

JACKSON HEIGHTS, BUSY AREA, near hospitals and transportation. Ultra modern offices, available for right doctors to either rent or purchase, can be given fully equipped for any specialty. Call owner/broker (212) 426-0400.

ROCKVILLE CENTRE, NEW YORK—Immediate sub-lease available Rockville Centre prestigious medical building. Large beautifully furnished office, 3 consulting rooms, 4 examining rooms. Can offer full services including lab tech, ECG, chest x-ray, and front desk support. Perfect for 1 or 2 physicians sharing with existing M.D. during day. Evenings and Saturday also available. Phone: 516-536-0700.

EQUIPMENT

PICKER C-3000 Cobalt^{60} Unit available. Output at 70CM is 50 rads for 10CM^2 field. Tel: (212) 271-0454.

what goes on IN CONTINUING MEDICAL EDUCATION

NEW YORK STATE **MARCH 1983**

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Please send information to the Editor, WHAT GOES ON,
420 Lakeville Road, Lake Success, New York 11042
Telephone 516-488-6100.

Compiled by the Division of Scientific Activities
George J. Lawrence, Jr., M.D., Director
Mrs. Tina Koty, Editor
Philip Keating, Director, Division of Finance

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NEW YORK

Saint Mary's Hospital of Brooklyn Department of Medicine

170 Buffalo Avenue, Brooklyn, NY 11213
* Third Floor—Board Room
March 2, 1983—Wednesday—8:00 AM-9:00 AM
THE NEW PNEUMONIAS
William Harris, M.D.
CREDIT: AMA Cat. 1
March 9, 1983—Wednesday—8:00 AM-9:00 AM
PULMONARY INFECTIONS IN THE COMPROMISED HOST
Stephen Seligman, M.D.
March 16, 1983—Wednesday—8:00 AM-9:00 AM
DIAGNOSIS AND MANAGEMENT OF PULMONARY EMBOLISM
John Crocco, M.D.
March 23, 1983—Wednesday—8:00 AM-9:00 AM
BRONCHODILATOR THERAPY
Anthony Mastellone, M.D.
March 30, 1983—Wednesday—8:00 AM-9:00 AM
SARCOIDOSIS
Andrew Wallman, M.D.
For further information contact the Department of Medicine at St. Mary's Hospital. Tel: 774-3600 ext. 2044 or 2045.

SUNY Downstate Medical Center Kings County Hospital Center in cooperation with District 1, NYSSA

Department of Anesthesiology
450 Clarkson Avenue
Brooklyn, NY 11203
March 1, 1983—4:00 PM-5:00 PM
VISITING PROFESSOR PROGRAM
ONE LUNG ANESTHESIA
March 2, 1983—5:00 PM-6:00 PM
EFFECTS OF ANESTHETICS ON NEURAL DEVELOPMENT
Herman Turndorf, M.D.
CREDIT: AMA Cat. 1
For further information contact Abraham I. Raskob, M.D., SUNY Downstate Medical Center. Tel: 212/270-1233.

Albert Einstein College of Medicine of Yeshiva University, Dept. of Surgery

1300 Morris Park Avenue
Bronx, NY 10461
* Van Etten Hospital—Room 523
March 4, 1983—4:00 PM-5:30 PM
ONCOLOGY FOR THE FAMILY PRACTITIONER PLEURAL EFFUSIONS—CASE STUDIES
J. Reichel, M.D.
March 18, 1983—4:00 PM-5:30 PM
ADJUVANT THERAPY IN COLON CANCER
H. Volk, M.D.
CREDIT: AAFP Cat. 1
For further information contact Margot L. Wulf, Albert Einstein College of Medicine of Yeshiva University. Tel: 212/430-2000.

The Jewish Hospital and Medical Center of Brooklyn in association with the American Cancer Society, New York Division, Brooklyn Unit, SUNY, Downstate Medical Center, Sponsored by the Division of Hematology/Oncology

555 Prospect Place, Brooklyn, NY 11238
* B-51 Conference Room, Basement, Leviton Bldg.
March 2, 1983—Wednesday—3:30 PM-4:30 PM
ADVANCES IN HEMATOLOGY AND ONCOLOGY INFECTIONS IN PATIENTS WITH CANCER
Brian Wong, M.D.
March 9, 1983—Wednesday—3:30 PM-4:30 PM
SECOND MALIGNANT NEOPLASMS
David S. Carroll, M.D.
March 16, 1983—Wednesday—3:30 PM-4:30 PM
NEW DATA ON THE STRUCTURE AND ORIGIN OF AMYLOID
Julian Rosenthal, M.D.
March 23, 1983—Wednesday—3:30 PM-4:30 PM
NEUROBLASTOMA
Aaron Rausen, M.D.
CREDIT: AMA Cat. 1
For further information contact the Jewish Hospital and Medical Center of Brooklyn. Tel: 212/240-1211.

The Page and William Black Postgraduate School of Medicine of the Mount Sinai School of Medicine (CUNY)

One Gustave L. Levy Place
New York, NY 10029
* Mount Sinai Medical Center
March 19 & March 26, 1983—9:00 AM-4:00 PM (Each Day)
ORTHOPAEDICS PM 283—THE SATURDAY MORNING GRAND ORTHOPAEDICS SYMPOSIA
Victor H. Frankel, M.D.
CREDIT: AMA Cat. 1
* Union Health Center, New York, NY
March 2, 1983—Wednesday—7:30 AM-9:30 AM
MOUNT SINAI TEACHING DAYS
CHRONIC RENAL DISEASE
Robert E. Feingold
March 9, 1983—Wednesday—7:30 AM-9:30 AM
INFERTILITY—MALE AND FEMALE
Victor Reyniak, M.D.
March 16, 1983—Wednesday—7:30 AM-9:30 AM
DIZZINESS
Bernard Cohen, M.D.
March 23, 1983—Wednesday—7:30 AM-9:30 AM
CLINICAL USE OF PULMONARY FUNCTION TESTS
Albert Miller, M.D.
March 30, 1983—Wednesday—7:30 AM-9:30 AM
SELECTION OF PATIENTS FOR CARDIAC SURGERY
Robert S. Litwak, M.D.
CREDIT: AMA Cat. 1
* Mount Sinai Medical Center
March 4, 1983—Friday—9:15 AM-1:30 PM
PROVIDING PRIMARY CARE TO THE BORDERLINE ADOLESCENT
Richard Wortman, M.D., Leslie R. Jaffe, M.D., & Michael Katch, M.S.W.
FEE: $50.00. CREDIT: AMA Cat. 1 (4.5 Hrs.)
March 19, 1983—Saturday—8:45 AM-4:00 PM
THE JOEL HARTLEY MEMORIAL SYMPOSIUM: FIRST AID-NOW; IT CAN MAKE THE DIFFERENCE
Michael A. Bleicher, M.D.
FEE: $85.00. CREDIT: AMA Cat. 1 (5.45 Hrs.)
March 18, 1983—Friday—8:45 AM-4:45 PM
COMMUNICATION DISORDERS
Asher Bar, Ph.D.
FEE: $40.00. CREDIT: AMA Cat. 1 (6.5 Hrs.)
March 25, 1983—Friday—9:00 AM-4:30 PM
NEW DIAGNOSTIC AND THERAPEUTIC TECHNIQUES IN PERIPHERAL VASCULAR SURGERY
FEE: $100, $50-House Staff. CREDIT: AMA Cat. 1 (6 Hrs.)
March 11, 12, 1983—Friday-Saturday—9:00 AM-5:00 PM
AN UPDATE IN INTERNAL MEDICINE FOR PRACTICING PSYCHIATRISTS & NEUROLOGISTS
Gerald Friedman, M.D.
FEE: $200. CREDIT: AMA Cat. 1 (13 Hrs.)
March 5, 1983—Saturday—9:00 AM-5:00 PM
SEXUAL DISORDERS IN MEDICAL PRACTICE

Raul C. Schiavi, M.D.
FEE: $75.00. CREDIT: AMA Cat. 1 (6.5 Hrs.)

Memorial Sloan-Kettering Cancer Center

1275 York Avenue, NY 10021
* Hoffman Auditorium
March 17, 18, 1983—Thursday & Friday
CONTROVERSIES IN MANAGEMENT OF INFECTIOUS COMPLICATIONS OF NEOPLASTIC DISEASES
For further information contact Charlene Landis, Memorial Sloan-Kettering Cancer Center. Tel: 212/794-6754.

NYU Medical Center Post-Graduate Medical School

550 First Avenue, NY 10016
* Alumni Hall—Classroom B
March 31, 1983 to April 28, 1983—Thursdays—1:30 PM-3:30 PM
#152 DERMATOLOGY FOR THE PRACTICING PHYSICIAN
David L. Ramsay, M.D.
CREDIT: AMA Cat. 1 (10 Hrs.)

NYU Medical Center Post-Graduate Medical School, Department of Medicine

550 First Avenue
New York, NY 10016
March 14-18, 1983—Monday to Friday
SEMINAR IN ADVANCED RHEUMATOLOGY
FEE: $580. CREDIT: AMA Cat. 1 (32 Hrs.)
* The Department of Anesthesiology
March 21-25, 1983—Monday to Friday
ANESTHESIOLOGY COMPREHENSIVE REVIEW II
A UNIQUE APPROACH TO MASTERY THROUGH THE CASE DISCUSSION METHOD
FEE: $490. CREDIT: AMA Cat. 1 (40 Hrs.)
* NYU Cancer Center
March 17-19, 1983—Thursday to Saturday
EPIDEMIC KAPOSI'S SARCOMA & OPPORTUNISTIC INFECTIONS IN HOMOSEXUAL MEN: EXPRESSION OF AN ACQUIRED IMMUNOREGULATORY DISORDER
FEE: $330. CREDIT: AMA Cat. 1 (17 Hrs.)
ONE-ON-ONE TUTORIALS IN:
FORENSIC SCIENCES
OFFICE OB ULTRASOUND
MANAGEMENT OF HIGH RISK PREGNANCY
PULMONARY FUNCTION TESTING AND BEDSIDE RESPIRATORY MONITORING
DIAGNOSTIC NUCLEAR MEDICINE
CARDIAC CATHERIZATION
RHEUMATOLOGY FOR PRIMARY CARE PHYSICIANS
GERIATRIC MEDICINE
EMERGENCY MEDICINE
For further information contact NYU Post-Graduate Medical School, 550 First Ave., New York, NY. Tel: 212/340-5295.

Intensive Clinical Neurology Course

1033 Hamilton Street
Allentown, PA 18101
* The Grand Hyatt of New York Hotel
March 25, 26, 27, 1983
SIXTH ANNUAL INTENSIVE CLINICAL NEUROLOGY COURSE
FEE: $265. CREDIT: AMA Cat. 1 (18 Hrs.) & AAFP
$165. (Residents)
For further information contact L. P. Levitt, M.D., 1033 Hamilton Street, Allentown, PA. Tel: 215/433-6474.

Institute for Advanced Research in Asian Science and Medicine, State University of New York Downstate Medical Center

450 Clarkson Avenue, Brooklyn, NY 11203
* Waldorf-Astoria Hotel, New York City
March 17-20, 1983—Thursday to Sunday
SCIENTIFIC SESSIONS
March 21-28, 1983—Monday to Monday
PRACTICAL TRAINING (WORKSHOPS)
CREDIT: AMA Cat. 1
For further information contact Ms. Evelyn Bleiweiss. Tel: 212/270-1164, 1163, 1629, 515/561-8149, 516/248-0930.

NYU Medical Center Post-Graduate Medical School and NYU Cancer Center

550 First Avenue, NY 10016
* Alumni Hall Auditorium
March 17, 1983—Thursday—
KAPOSI'S SARCOMA: CLINICAL FEATURES
OPPORTUNISTIC INFECTIONS IN HOMOSEXUAL MEN
Franco Muggia, M.D.
March 18, 1983—Friday—
IMMUNOLOGY
Pablo Rubinstein, M.D.
March 19, 1983—Saturday—
CLINICAL ISSUES
Linda J. Laubenstein, M.D.
CREDIT: AMA Cat 1 (17 Hrs.)
March 21-25, 1983—Monday to Friday
COURSE NO. 100—ANESTHESIA COMPREHENSIVE REVIEW: II
Marilyn M. Kritchman, M.D.
Herman Turndorf, M.D.
CREDIT: AMA Cat. 1 (40 Hrs.)
For further information contact Registration Office, NYU Post-Graduate Medical School. Tel: 212/340-5295.

Doctors Hospital

170 East End Avenue New York, NY 10028
March 3, 1983—Thursday—4:15 PM
CARDIOVASCULAR DISEASES IN CLINICAL PRACTICE
CLINICAL LECTURES—CARDIAC PACEMAKERS
Alvin J. Gordon, M.D., George R. Holswade, M.D.
CREDIT: AMA Cat. 1 (1½ Hrs.)
March 19, 1983—Saturday—9:00 AM-12:30 PM
CLINICAL SYMPOSIA—CEREBRAL VASCULAR DISORDERS
Irving S. Wright, M.D., John J. Caronna, M.D.
CREDIT: AMA Cat. 1 (3 Hrs.)
For further information contact the Secretary of CME, Doctors Hospital. Tel: 212/870-9118.

The N.Y. Branch of The Orton Society, Inc.

80 Fifth Avenue, Room 903
New York, NY 10011
* New York Statler Hotel
March 10, 11, 12, 1983
1983 TENTH ANNUAL CONFERENCE MEETING THE CHALLENGE OF DYSLEXIA RESEARCH, THEORY & INSTRUCTION
For further information contact The N.Y. Branch of The Orton Dyslexia Society, NY 10011, Room 903. Tel: 212/691-1930.

Lenox Hill Hospital
Department of Medicine, Allergy Subspecialty

100 East 77th Street
New York, NY 10021
* Lenox Hill Hospital's Einhorn Auditorium
131 East 76th St., New York City
March 29, 1983—Tuesday—8:45 AM
A PRAGMATIC COURSE FOR THE TREATMENT OF ALLERGIC DISEASE
FEE: $100 Physicians; $50 Residents & Fellows in Training
CREDIT: AMA Cat. 1 (5 Hrs.)
For further information contact Anne R. Warner, Lenox Hill Hospital, N.Y. Tel: 212/794-4500.

Beth Israel Medical Center Co-Sponsored by The Page and William Black Post-Graduate School of the Mount Sinai School of Medicine, CUNY

10 Nathan D. Perlman Place
New York, NY 10003
* Podell Auditorium
March 15, 1983—Tuesday—8:30 AM-4:30 PM
March 16, 1983—Wednesday—8:30 AM-4:00 PM
LEARNING DISABILITIES: FACT AND CONTROVERSIES
Michael V. Osborn, M.D., Sylvia Balick, Ph.D.
FEE: $120 Practicing Physicians; $80 House Staff, Allied Health Professionals
CREDIT: AMA Cat. 1 (12 Hrs.)
For further information contact Beverley R. Baptiste, Beth Israel Medical Center. Tel: 212/420-2000.

New York State Office of Mental Health Kings Park Psychiatric Center

Kings Park, NY 11754
* Auditorium, Day Treatment Center
Kings Park Psychiatric Center
March 2, 1983—10:30 AM-12:00 Noon
THERAPEUTIC APPROACHES FOR THE PSYCHIATRIC PATIENT WITH SLEEP DISORDERS
M. Thorpy, M.D.
March 9, 1983—10:30 AM-12:00 Noon
THERAPEUTIC APPROACHES TO THE INSTITUTIONALIZED ELDERLY PSYCHIATRIC PATIENT
H. Shapiro, M.D.
March 31, 1983—9:15 AM-4:00 PM
DIFFERENTIAL DIAGNOSIS OF ORGANIC MENTAL DISORDERS
R. Vickers, M.D.
CREDIT: CME Cat. 1
For further information contact G. V. Laury, M.D., Kings Park Psychiatric Center, Kings Park, NY. Tel: 516/544-2669.

The Ophthalmological Foundation of America, Inc.

823 United Nations Plaza, NY 10017
March 24-26, 1983—Begins Thursday at 5:00 PM
SURGICAL COURSES IN LENS IMPLANTATION
Miles A. Galin, M.D.
For further information contact Mrs. Ruth Green, Admin. Tel: 212/986-4848.

QUEENS COUNTY

Long Island Jewish-Hillside Medical Center/ Queens Hospital Center Affiliation, The Postgraduate Institute for Medical and Dental Education and the Health Sciences Center State University of New York at Stony Brook Department of Medicine

New Hyde Park, NY
* Nursing School Auditorium—Queens Hospital Center
82-68 164th Street, Jamaica, NY
March 2, 1983—Wednesday—11:00 AM-12:00 Noon
A CLINICAL APPROACH TO OSTEOPENIA: DIAGNOSIS AND TREATMENT—GRAND ROUNDS
John Aloia, M.D.
March 9, 1983—Wednesday—11:00 AM-12:00 Noon
MANAGEMENT OF GERM CELL TUMORS—STATE OF THE ART—GRAND ROUNDS
Davor Vugrin, M.D.
March 16, 1983—Wednesday—11:00 AM-12:00 Noon
THE TREATMENT OF ARTHRITIS IN CHILDHOOD—GRAND ROUNDS
Jerry Jacobs, M.D.
March 23, 1983—Wednesday—11:00 AM-12:00 Noon
NON-THROMBOTIC PULMONARY VASCULAR DISEASE. AN OVERVIEW—GRAND ROUNDS
Rajinder Chitkara, M.D.
March 30, 1983—Wednesday—11:00 AM-12:00 Noon
ACQUIRED IMMUNODEFICIENCY SYNDROME—GRAND ROUNDS
Frederick Siegal, M.D.
For further information contact Herbert Diamond, M.D., Dept. of Medicine, L.I.J. Medical Center, New Hyde Park, NY

Long Island Jewish-Hillside Medical Center/ Queens Hospital Center Affiliation Department of Psychiatry

82-68 164th Street
Jamaica, NY 11432
* School of Nursing, Queens Hospital Center
March 4, 1983—Friday—11:00 AM-12:00 Noon
THE HOMELESS IN NEW YORK CITY—GRAND ROUNDS
Robert M. Hayes, J.D.
March 11, 1983—Friday—11:00 AM-12:00 Noon
TOURETTE SYNDROME: THE SUDDEN INTRUDER—GRAND ROUNDS
Ruth Bruun, M.D.
March 18, 1983—Friday—11:00 AM-12:00 Noon
IMAGINATION AND THE PSYCHOTHERAPEUTIC PROCESS—GRAND ROUNDS
Zvi Lothane, M.D.
March 25, 1983—Friday—11:00 AM-12:00 Noon
PROBLEMS IN THE TREATMENT OF ACUTE PSYCHOTIC DISORDERS GRAND ROUNDS
Victor Rudy, M.D.
CREDIT: AMA Cat. 1
For further information contact Philip E. Levine, M.D., Dept. of Psychiatry, Queens Hospital Center. Tel: 212/990-3551.

Peninsula Hospital Center under the Auspices of Downstate Medical Center, Co-Sponsored by the Academy of Medicine, County of Queens

51-15 Beach Channel Drive
Far Rockaway, NY 11691
* Perlberg Auditorium

March 6, 1983—Sunday—9:00 AM–12:00 Noon
INTENSIVE REVIEW FOR FAMILY PHYSICIANS VENEREAL DISEASE
William M. McCormack, M.D.
March 13, 1983—Sunday—9:00 AM–12:00 Noon
DIABETES
Sheldon Bleicher, M.D.
March 20, 1983—Sunday—9:00 AM–12:00 Noon
COMMON ORTHOPEDIC PROBLEMS
Mark F. Sherman, M.D.
CREDIT: AMA Cat. 1 & AAFP
For further information contact Edward H. Davis, M.D., Peninsula Hospital Center. Tel: 212/945-7100, ext. 377.

Flushing Hospital and Medical Center

4500 Parsons Blvd.
Flushing, NY 11355
March 6, 1983—Sunday—9:00 AM–1:00 PM
SECOND ANNUAL REVIEW IN INTERNAL MEDICINE
ALLERGY & IMMUNOLOGY
Michael Grieco, M.D.
FEE: Per session: $50.00 FH&MC Staff Members
Department of Medicine
March 1, 1983—Tuesday—10:30 AM–12:00 Noon
GRAND ROUNDS—AUTOIMMUNE DISEASES: IMMUNOLOGIC MECHANISM AND THERAPEUTIC IMPLICATIONS
Arye Rubinstein, M.D.
March 8, 1983—Tuesday—9:00 AM–12:00 Noon
3 HOUR INFECTIOUS DISEASE SYMPOSIUM—GRAND ROUNDS
James Rahal, M.D., James Pennington, M.D., Harlan Stone, M.D.
March 15, 1983—Tuesday—10:30 AM–12:00 Noon
HEMATOLOGY UPDATE: 1983—GRAND ROUNDS
Ira Sussman, M.D.
March 22, 1983—Tuesday—10:30 AM–12:00 Noon
INFLAMMATORY BOWEL DISEASE—GRAND ROUNDS
David Sachar, M.D.

CREDIT: AMA Cat. 1
For further information contact Luisa T. Gonzalez, Coordinator, CME, Flushing Hospital and Medical Center. Tel: 212/670-5741.

The Jamaica Hospital

89th Avenue & Van Wyck Expressway
Jamaica, NY 11418
* Community Room
March 3, 1983—Thursday—8:30 AM–9:30 AM
CARDIOLOGY PULMONARY EDEMA
Nathan Seriff, M.D.
March 17, 1983—Thursday—8:30 AM–9:30 AM
MEDICAL MANAGEMENT OF THE POST MYOCARDIAL PATIENT
William Frishman, M.D.
March 31, 1983—Thursday—8:30 AM–9:30 AM
CONGESTIVE HEART FAILURE
Thierry Le Jemtel, M.D.
* Trump Pavilion
March 16, 1983—Wednesday—9:00 AM–10:30 AM
PHARMACOLOGY OF HYPERTENSION
Harold D. Itskovitz, M.D.
* Community Room
March 1, 1983—Tuesday—8:30 AM–9:30 AM
ENDOCRINOLOGY & METABOLISM
CLINICAL APPLICATION OF THYROID FUNCTION TESTS
Lawrence Rosman, M.D.
March 4, 1983—Friday—8:30 AM–9:30 AM
MEDICAL GASTROENTEROLOGY THERAPEUTIC ENDOSCOPY
David Falkenstein, M.D.
March 18, 1983—Friday—8:30 AM–9:30 AM
PHARYNGEAL DYSPHAGIA: CLINICAL AND PHYSIOLOGICAL ASPECTS
Bernard R. Cohen, M.D.
March 25, 1983—Friday—8:30 AM–9:30 AM
DISEASES OF THE LIVER, PART III Fenton Schaffner, M.D.
March 8, 1983—Tuesday—8:30 AM–9:30 AM
HEMATOLOGY
PLASMA CELL DYSCRASIA
Shetra Sivamurthy, M.D.
March 10, 1983—Thursday—8:30 AM–9:30 AM
INFECTIOUS DISEASES INTRA-ABDOMINAL SEPSIS
Robert H. Lapin, M.D.
* Trump Pavilion
March 2, 1983—Wednesday—9:00 AM–10:30 AM
MEDICAL GRAND ROUNDS & PROGRESS IN MEDICINE
ANATOMICAL CORRELATION OF NEUROLOGICAL DEFICITS—PART 1
Alfred C. Bannerman, M.D.
March 9, 1983—Wednesday—9:00 AM–10:30 AM
ANATOMICAL CORRELATION OF NEUROLOGICAL DEFICITS—PART II
Alfred C. Bannerman, M.D.
March 16, 1983—Wednesday—9:00 AM–10:30 AM
PHARMACOLOGY OF HYPERTENSION
Harold D. Itskovitz, M.D.
March 23, 1983—Wednesday—9:00 AM–10:30 AM
EMPHYSEMA
John J. Rooney, M.D.
* Community Room
March 22, 1983—Tuesday—8:30 AM–9:30 AM
NEPHROLOGY FLUID, ELECTROLYTE AND METABOLIC ABERRATIONS IN CHRONIC RENAL FAILURE
Emmanuel B. Masih, M.D.
March 15, 1983—Tuesday—8:30 AM–9:30 AM
NEUROLOGY
NEUROLOGY OF SPORTS
Alfred C. Bannerman, M.D.
* Assembly Room
March 4, 1983—Friday—12:30 PM
PROBLEM SOLVING WITH CAT SCANNING
Mark E. Gershwind, M.D.
* Community Room
March 11, 1983—Friday—8:30 AM–9:30 AM
ONCOLOGY PANCREATIC CANCER
Vincent Vinciguerra, M.D.
* Assembly Room
March 25, 1983—Friday—12:30 PM–1:30 PM
PATHOLOGY GRAND ROUNDS
DIAGNOSIS OF INFECTIOUS DISEASES BY IMMUNOFLUORESCENCE
Laurence B. Senterfit, Sc.D.
March 14, 1983—Monday—12:30 PM–1:30 PM
PRIMARY CARE CONFERENCES—OPHTHALMOLOGY
THE RED EYE
Jerome A. Javis, M.D.
March 21, 1983—Monday—12:30 PM–1:30 PM
GLAUCOMA: RECOGNITION & MANAGEMENT
Jerome A. Jarvis, M.D.
March 7, 1983—Monday—12:30 PM–1:30 PM
ORTHOPEDICS
THE PAINFUL BACK
Felix Rosenhain, M.D.
March 28, 1983—Monday—12:30 PM–1:30 PM
UROLOGY
HEMATURIA
Paul J. Cutrofello, M.D.
* Trump Pavilion
March 23, 1983—Wednesday—9:00 AM–10:30 AM
PULMONARY DISEASES
EMPHYSEMA
John J. Rooney
* Community Room

March 24, 1983—Thursday—8:30 AM—9:30 AM
RHEUMATOLOGY CRYSTALLINE ARTHROPATHIES
Alan T. Kaell, M.D.
For further information contact The Jamaica Hospital, Jamaica, NY. Tel: 212/657-1800.

American Society For Clinical Evoked Potential, Inc. Co-Sponsored by The Westchester Academy of Medicine

56-45 Main Street
Flushing, NY 11355
March 18-20, 1983
THE THIRD ANNUAL WORKSHOP
For further information contact Yasoma Challenor, M.D., Blythedale Hospital, Valhalla, NY 10595. Tel: 914/592-7555, ext. 314.

Booth Memorial Medical Center

56-45 Main Street
Flushing, NY 11355
* North Conference Room
March 3, 1983—Thursday—9:15 a.m.-10:15 a.m.
PEDIATRIC PERSPECTIVES
HEADACHES IN CHILDREN
Irving Fish, M.D.
March 10, 1983—Thursday—9:15 a.m.-10:15 a.m.
GENETIC COUNSELING FOR PARENTS OF HANDICAPPED CHILDREN
Marcia Wishnick, M.D.
FEE: $60.00 CREDIT: AMA Cat. 1
For further information contact Clo Vezza, Booth Memorial Medical Center, Tel: 212/670-1419.

NASSAU COUNTY

Long Island Jewish-Hillside Medical Center The Department of Ophthalmology

New Hyde Park, NY 11042
* Long Island Jewish-Hillside Medical Center Teaching Center
March 9, 1983—8:00 AM-4:00 PM
RETINA AND PHOTOCOAGULATION
Alan Bird, M.D., Stuart Fine, M.D., Donald Glass, M.D.
For further information contact Ann J. Boehme, Continuing Education Coordinator. Tel: 212/470-2114.

The Page and William Black Postgraduate School of Medicine of the Mount Sinai School of Medicine (CUNY)

One Gustave L. Levy Place, NY 10029
* Long Beach Memorial Hospital
March 8, 1983—Tuesday—4:00 PM-6:00 PM
MOUNT SINAI TEACHING DAYS
TRANSLUMINAL ANGIOPLASTY & ENZYMATIC TREATMENT OF MYOCARDIAL INFARCTION
Klaus Peter Rentrop, M.D.
CREDIT: AMA Cat. 1

Hempstead General Hospital

800 Front Street
Hempstead, NY 11551
* Hospital Dining Room
March 9, 1983—Wednesday—7:00 PM
G-U EMERGENCIES
Michael Ferragamo, M.D.
March 9, 1983—Wednesday—8:00 PM
OB-GYN EMERGENCIES
Robert Nadel, M.D.
CREDIT: AMA Cat. 1
For further information contact Valerie Roessner, Hempstead General Hospital. Tel: 516/560-1216.

Nassau County Medical Center

2201 Hempstead Turnpike
East Meadow, NY 11554
March 3, 1983—Thursday—10:00 AM
THE THIRD ANNUAL MEDICAL GRAND ROUNDS BLOOD SUGAR, DIABETES AND THE ELDERLY
Felix Silverstone, M.D.
March 10, 1983—Thursday—10:00 AM
CONTROL AND MANAGEMENT OF ACUTE LEUKEMIAS
Peter Wiernik, M.D.
March 17, 1983—Thursday—10:00 AM
SEXUALLY TRANSMITTED DISEASES
Yehudi M. Felman, M.D.
March 24, 1983—Thursday—10:00 AM
TISSUE TYPING IN CLINICAL PRACTICE
Alan S. Josephson, M.D.
March 31, 1983—Thursday—10:00 AM
THE MANAGEMENT OF PATIENTS SURVIVING AN ACUTE MYOCARDIAL INFARCTION
John B. Kostis, M.D.
CREDIT: AMA Cat. 1 & AAFP
For further information contact Ethal A. Ford, CME Coordinator, Dept. of Medicine, Nassau County Medical Center. Tel: 516/542-0123.
March 1983 thru May 1983—Thursdays—4:00 PM-5:00 PM
GENETICS FOR THE PEDIATRICIAN
CREDIT: AMA Cat. 1
For further information contact Jack Sherman, M.D. Tel: 516/542-3391.

Long Island Jewish-Hillside Medical Center Co-Sponsored by Departments of Social Work Services and Psychiatry, Long Island Jewish Medical Center; Widowed Persons Service of Nassau and Queens and American Association of Retired Persons

New Hyde Park, NY 11042
* Jewish Institute for Geriatric Care Auditorium
New Hyde Park, NY
March 18, 1983—Friday—8:30 AM-3:30 PM
BEREAVEMENT: THE IMPACT OF LOSS ON SURVIVING FAMILY MEMBERS
Sidney Pinsky, D.S.W., Leonard Tuzman, C.S.W.
CREDIT: CME Cat. 1 (6 Hrs.)

Division of Urology, Dept. of Surgery

New Hyde Park, NY 11042
* Teaching Center Auditorium
March 25-26, 1983—Friday & Saturday—7:30 AM-5:30 PM
ENDO-UROLOGICAL (PERCUTANEOUS) STONE EXTRACTION
Arthur Smith, M.D.
CREDIT: CME Cat. 1 (16 Hrs.). Fee: $500.
For further information contact Ann J. Boehme, Long Island Jewish-Hillside Medical Ctr. Tel: 212/470-2114.

Nassau Academy of Medicine Co-Sponsored by The American College of Legal Medicine

1200 Stewart Avenue
Garden City, NY 11530
* Hauth Auditorium
March 24, 1983—Thursday—8:00 p.m.-10:00 p.m.
DO THEY LIVE OR DIE? WHO DECIDES?
AN OPEN FORUM ON THE BROTHER FOX CASE
Harold W. Mayberger, M.D.
CREDIT: AMA Cat.1 & AAFP (2 hrs.)
For further information contact Mr. William R. Egan at 516/832-2305.

SUFFOLK COUNTY

Brookhaven Memorial Hospital Medical Center

101 Hospital Road
Patchogue, NY 11772
* 1st Floor Conference Room
March 1, 1983—Tuesday—8:00 AM-9:00 AM
PEDIATRIC CONFERENCES
THERMAL REGULATION IN THE NEWBORN
Philip Lipsitz, M.D.
March 4, 1983—8:00 AM-9:00 AM
CLINICAL PROBLEMS IN FAMILY MEDICINE
HEMATOLOGY/ONCOLOGY—ALLERGY TESTING
Paul Lusman, M.D.
March 11, 1983—8:00 AM-9:00 AM
ENDOCRINE, NUTRITION, METABOLIC LIVER FAILURE
Louise Walk, M.D.
March 25, 1983—8:00 AM-9:00 AM
ORAL MANIFESTATIONS OF SYSTEMIC DISEASE
Mark Swerdloff, M.D.
CREDIT: AMA Cat. 1
For further information contact Dorothy S. Lane, M.D., Brookhaven Memorial Hospital, Medical Ctr. Tel: 516/654-7795.

WESTCHESTER COUNTY

White Plains Hospital Medical Center

Davis Avenue at East Post Road
White Plains, NY 10601
March 30, 1983—Wednesday—8:30 a.m.
GASTROENTEROLOGY DAY
For further information contact Toni Calabrese Boelsen. White Plains Hospital Medical Ctr. Tel: 914/681-1118.

SULLIVAN COUNTY

The Page and William Black Postgraduate School of Medicine of the Mount Sinai School of Medicine (CUNY)

One Gustave L. Levy Place
New York, NY 10029
* Community General Hospital of Sullivan County
March 8, 1983—Tuesday—3:00 PM-6:00 PM
SEXUALLY TRANSMITTED DISEASES
Glenn S. Hammer, M.D. & Donna Mildvan, M.D.
CREDIT: AMA Cat. 1

DUTCHESS COUNTY

Harlem Valley Psychiatric Center New York Medical College

Wingdale, NY 12594
March 4, 1983—Friday—10:00 AM-11:30 AM
PSYCHIATRIC INTERVIEW TECHNIQUE AND FORMULATION: DIFFERENTIAL DIAGNOSTIC AND PSYCHODYNAMIC FORMULATIONS
Donald Kaitz, M.D.
March 11, 1983—Friday—10:00 AM-11:30 AM
RECENT ADVANCES IN PSYCHOPHARMACOLOGY: NEW ANTIDEPRESSANT DRUGS
Marion Brancucci, M.D.
March 18, 1983—Friday—10:00 AM-11:30 AM
LONG-TERM LITHIUM TREATMENT
Luis Rodriguez, M.D.
March 25, 1983—Friday—10:00 AM-11:30 AM
THE BIOCHEMISTRY OF PSYCHIATRIC DISORDERS
Jay Novins, M.D.
For further information contact Beth H. Davies, R.N., M.S., Harlem Valley Psychiatric Center. Tel: 914/832-6611.

BUFFALO

Roswell Park Memorial Institute Dept. of Health—State of New York

666 Elm Street
Buffalo, NY 14263
March 10, 1983—Thursday
ONCOLOGY SEMINAR SERIES UPDATE IN MALIGNANT MELANOMAS
Dr. C. P. Karakousis
FEE: $45.00—Physicians—$15.00—Residents & Allied Health Professionals
March 17, 1983—Thursday
HUMAN GENETICS AND CANCER
Dr. Thomas Shows
For further information contact Gayle Bersani, R.N., Cancer Control Coordinator. Tel: 716/845-4406.

State University of New York at Buffalo Department of Anesthesiology Co-Sponsored by The New York State Society of Anesthesiologists, Inc.

219 Bryant Street
Buffalo, NY
* The Erie County Medical Center
March 21, 1983—Monday—5:00 PM-6:30 PM
VISITING PROFESSOR PROGRAM
DISEASES OF THE NEUROMUSCULAR ENDPLATE
March 21, 1983—Monday—6:00 PM-9:00 PM
PROBLEMS ASSOCIATED WITH: THE MANAGEMENT OF THE PARAPLEGIC PATIENT
March 22, 1983—Tuesday—4:00 PM-5:00 PM
ANESTHETIC MANAGEMENT OF MYOPATHIC CONDITIONS
March 23, 1983—Wednesday—7:30 PM-8:30 PM
COMBINED CONFERENCE
CREDIT: CME Cat. 1
For further information contact SUNY at Buffalo, Dept. of Anesthesiology, 219 Bryant St., Buffalo, NY

OUT OF STATE

State University of New York at Buffalo Sponsored by The Department of Pediatrics, Children's Hospital of Buffalo and CME, School of Medicine, and Dept. of Pediatrics, University of South Florida, College of Medicine, Tampa, Florida

219 Bryant Street
Buffalo, NY 14222
* The Sarasota Hyatt House, Sarasota, Florida
March 10–12, 1983
THE THIRD NATIONAL CONFERENCE ON RECENT ADVANCES IN PEDIATRIC LUNG DISEASES
Michelle M. Cloutier, M.D., Donald R. Cooney, M.D. & Gerd J.A. Cropp, M.D., Ph.D.
FEE: $250—Physicians in Practice
$150—Allied Health Professionals
CREDIT: AMA Cat. 1 (19 Hrs.)
For further information contact Rayna Dutton, Children's Hospital of Buffalo. Tel: 716/878-7630/7640.

Long Island Jewish-Hillside Medical Center

New Hyde Park, NY 11042
* Kiawah Inn, Kiawah, SC
March 11–13, 1983
1983 REGIONAL CME MEETINGS
AMERICAN COLLEGE OF PHYSICIANS
For further information contact Allen H. Johnson, M.D., FACP, Div. Gen. Internal Medicine, Medical University of South Carolina, 171 Ashley Ave., Charleston, SC 29401.
* National Medical Center, Mexico City, Mexico
1983 REGIONAL CME MEETINGS
AMERICAN COLLEGE OF PHYSICIANS
For further information contact Luis Landa, M.D., FACP, Sierra Leona 230, Mexico City, Mexico 11000, DF.

The American Academy of Allergy & Immunology
Sponsored by The University of California-San Diego

611 East Wells Street
Milwaukee, WI 53202
* Town and Country Hotel, San Diego, CA
March 2–3, 1983
ALLERGY/IMMUNOLOGY: WHAT'S NEW & PRACTICAL
For further information contact Dr. Stephen Wasserman, University Hospital, 225 W. Dickinson St., San Diego, CA 92103. Tel: 714/294-5982 or 294-6911.

American Society of Preventive Oncology
Memorial Sloan-Kettering Cancer Center

1275 York Avenue
New York, NY 10021
* Holiday Inn, Bethesda, Maryland
March 24–25, 1983
THE SEVENTH ANNUAL MEETING
For further information contact Dr. David Schottenfeld, Memorial Sloan-Kettering Cancer Center, New York.

FUTURE EVENTS

Long Island Jewish-Hillside Medical Center
The Department of Ophthalmology

New Hyde Park, NY 11042
* Long Island Jewish-Hillside Medical Center Teaching Center
April 6, 1983—8:00 AM–4:00 PM
VITREOUS SURGERY
Steven Charles, M.D., H. MacKenzie, Freeman, M.D., Richard Mackool, M.D.
For further information contact Ann J. Boehme, Continuing Education Coordinator, Long Island Jewish-Hillside Medical Center. Tel: 212/470-2114.

Beth Israel Medical Center in affiliation with The Page and William Black Post-Graduate School of Medicine of the Mount Sinai School of Medicine (CUNY)

10 Nathan D. Perlman Place
New York, NY 10003
* Podell Auditorium, Nathan D. Perlman Place
April 23, 1983—Saturday—8:30 AM–5:00 PM
ARTHUR J. BARSKY, MD MEMORIAL SYMPOSIUM
Lester Silver, M.D., J. William Littler, M.D.
CREDIT: AMA Cat. 1 (6 Hrs.)
For further information contact Medical Education Office, Beth Israel Medical Center. Tel: 212/420-2849.

The International Oculoplastic Society, Inc.

630 Park Avenue
New York, NY 10021
* The Waldorf-Astoria, New York, NY
April 27–30, 1983
THE INTERSPECIALTY FACIAL SURGERY CONGRESS FOR AESTHETIC, CANCER AND RECONSTRUCTIVE SURGERY
John Conley, M.D.
For further information contact Ms. A. Burnett, c/o Pierre Guibor, M.D. Tel: 212/734-1010 or 800/223-4500.

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Philip Keating, Business Manager

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420 Lakeville Road, Lake Success, New York 11042
Telephone 516-488-6100.

ANESTHESIOLOGIST

MONTICELLO, N.Y., contact Carl K. Heins, M.D., Hamilton Avenue Hospital, Monticello, 12701. Tel: 914/794-4545.

SARATOGA SPRINGS, N.Y., contact Allen T. Jones, M.D., 31 Myrtle St., Saratoga Springs 12866. Tel: 518/584-1978.

WILLARD Area Hospital, Ohio, contact James H. Ross, Jr., Administrator. Tel: 419/933-2931 8:00 a.m.–4:00 p.m.

CARDIOLOGY

SIDNEY, N.Y., contact John W. Sands, Administrator, The Hospital, New York 13838. Tel: 607/563-3512.

EMERGENCY ROOM

BUFFALO, N.Y., contact Lafayette General Hospital, 113 Lafayette Avenue, Buffalo 14213. Tel: 716/885-8900.

ONEONTA, N.Y., contact John Spoor, M.D., Director, A. O. Fox Memorial Hospital, 1 Norton Ave., Oneonta 13820. Tel: 607-432-2000.

ROME, N.Y., contact A. Carnicelli, Rome Hospital and Murphy Memorial Hospital, 1500 North James Street, Rome, N.Y. 13440. Tel: 315-336-1400.

ENT

GLENS FALLS, N.Y., contact Orei Friedman, M.D., 591 Glen St., P.O. Box 444, Glens Falls 12801. Tel: 518/792-1404.

LONG BEACH, N.Y., contact Oscar Sreter, M.D., 270 Edward Blvd., Long Beach 11561. Tel: 516/431-7861.

OLEAN, N.Y., contact Dr. Edward R. Mountain, 1909 West State St., Olean, 14760. Tel: 716/372-2788.

ORCHARD PARK, N.Y., contact R. M. Patel, M.D., 55 Melroy Avenue, Lackawanna, N.Y. 14218

FAMILY PHYSICIAN

ADAMS, N.Y., contact South Jefferson Recruiting Comm., c/o Mrs. Fred Spinner, RFD#2, P.O. Box 1114, Adams 13605.

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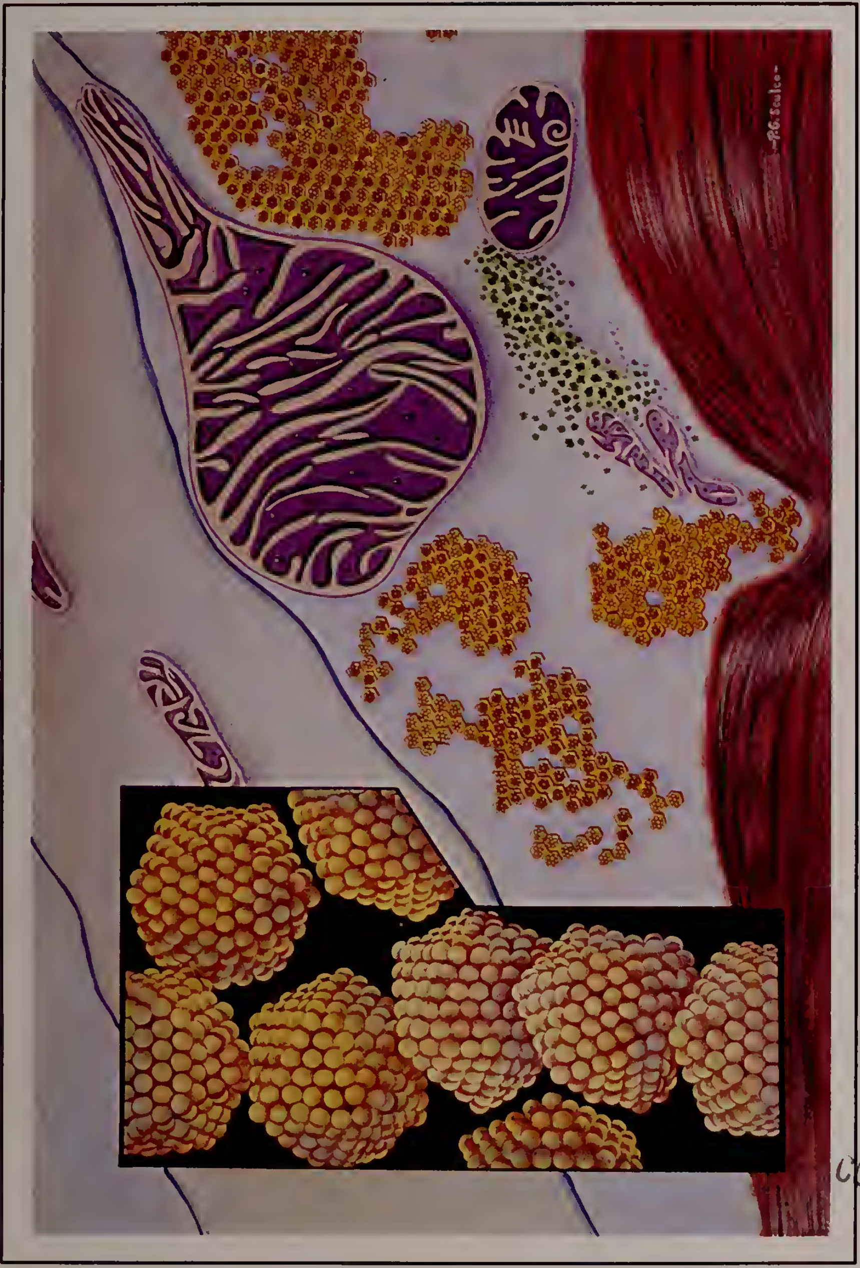

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Reyes Syndrome: Schematic painting of skeletal muscle demonstrating glycogen complexes between protein molecules. Illustration by Philomena Sculco.

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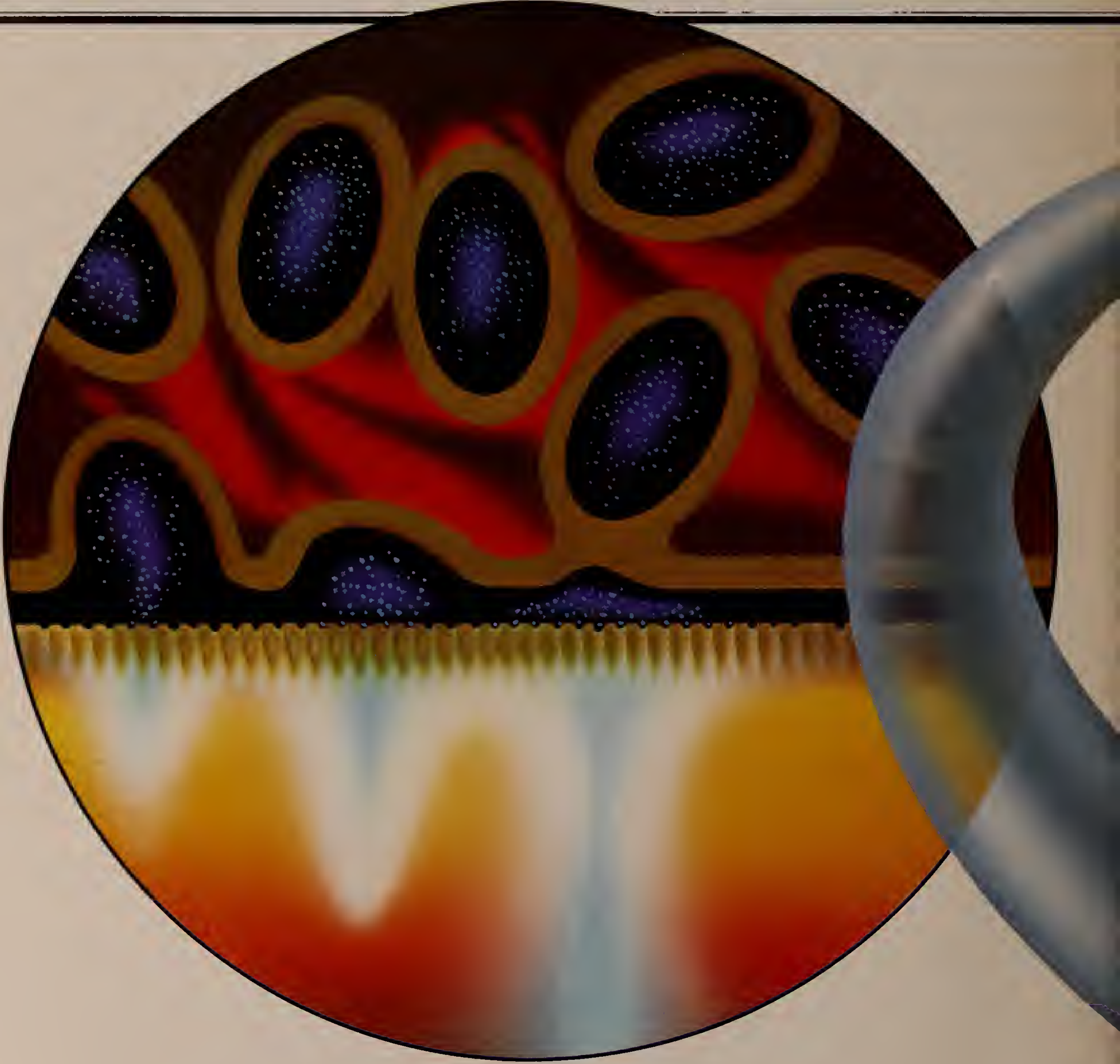

Artist's concept of neurotransmitter being released into synaptic cleft and impinging on receptor sites

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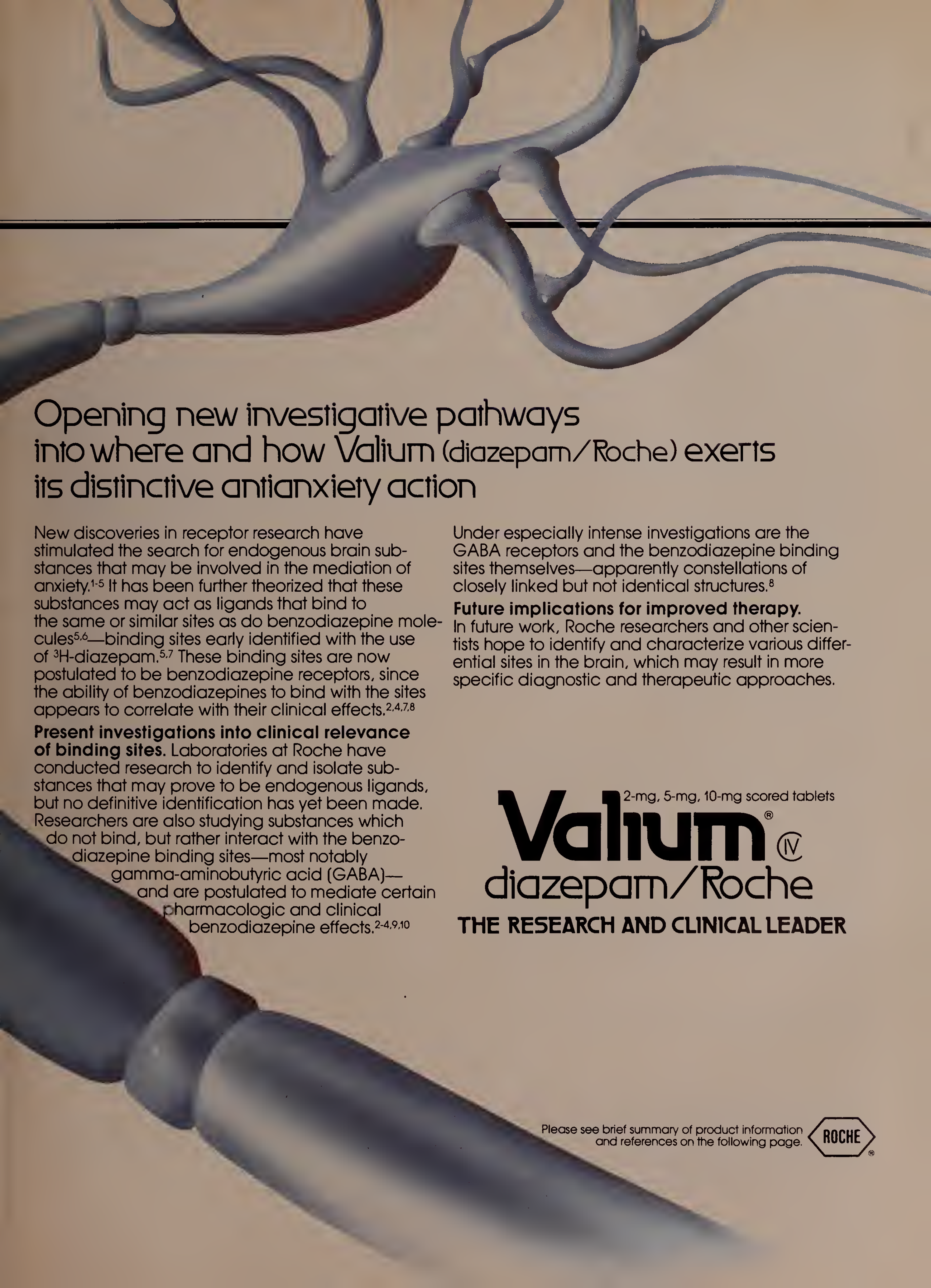

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Present investigations into clinical relevance of binding sites. Laboratories at Roche have conducted research to identify and isolate substances that may prove to be endogenous ligands, but no definitive identification has yet been made. Researchers are also studying substances which do not bind, but rather interact with the benzodiazepine binding sites—most notably gamma-aminobutyric acid (GABA)—and are postulated to mediate certain pharmacologic and clinical benzodiazepine effects.[2-4,9,10]

Under especially intense investigations are the GABA receptors and the benzodiazepine binding sites themselves—apparently constellations of closely linked but not identical structures.[8]

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How to Write and Publish Papers in the Medical Sciences. By Edward J. Huth, M.D. Philadelphia, ISI Press, 1982. Illustrated, 203 pages. Hardcover, $17.95.

CELLULAR BIOLOGY

Cellular Biology of the Lung. Edited by G. Cumming and G. Bonsignore. New York, Plenum Publishing Corp., 1982. Illustrated, 488 pages. Hardcover, $57.50.

METABOLISM

Contemporary Metabolism. Edited by Norbert Freinkel, M.D. Plenum Publishing Corp., 1982. Illustrated, 540 pages. Hardcover, $42.50.

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* Books received for review are acknowledged promptly in this column. No other obligation is assumed for the courtesy of those sending them for this purpose. Selection for review is made on the basis of merit and reader interest.

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January 1983 Volume 83 Number 1

"Dedicated to the continuing education of the physician"

82ND YEAR OF PUBLICATION

Published monthly by the Medical Society of the State of New York

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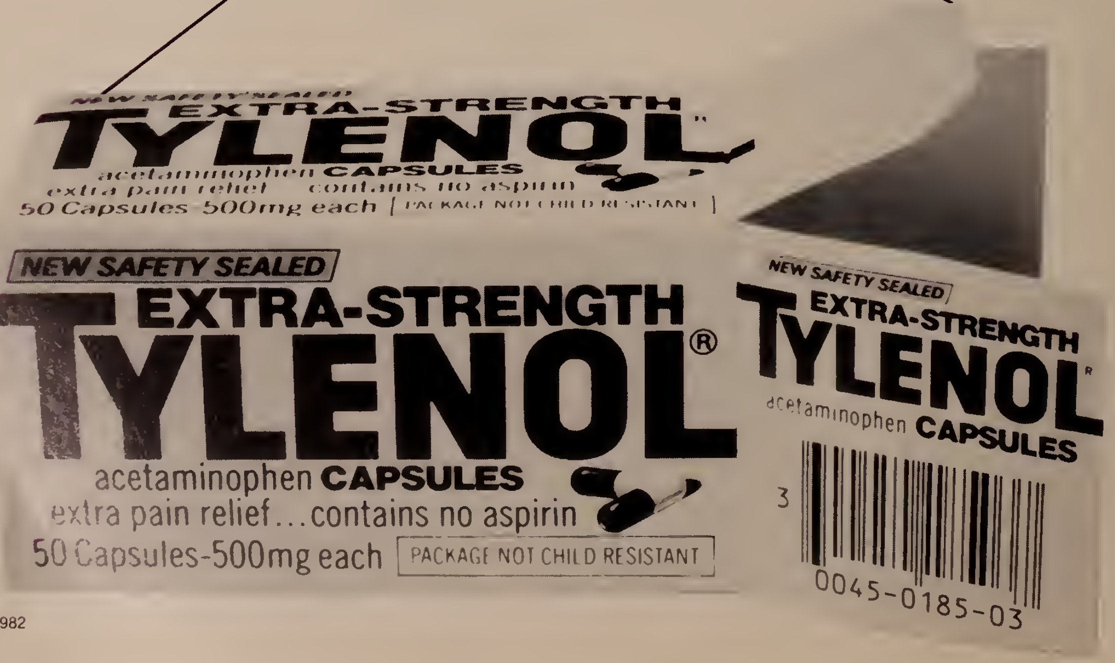

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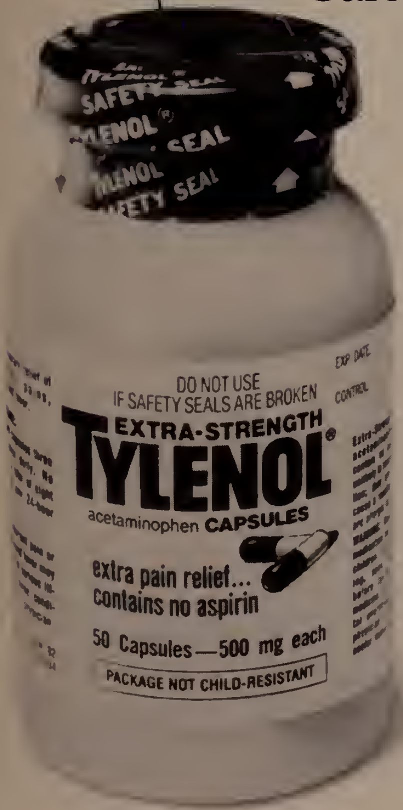
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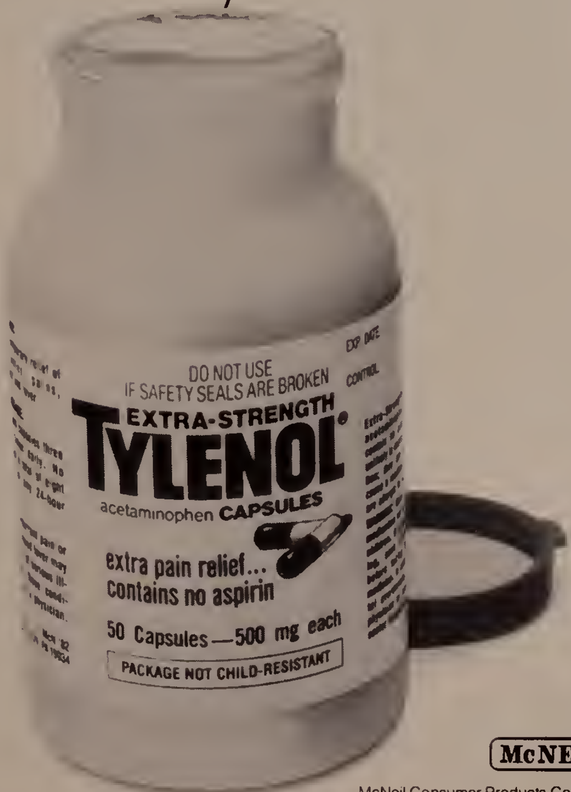
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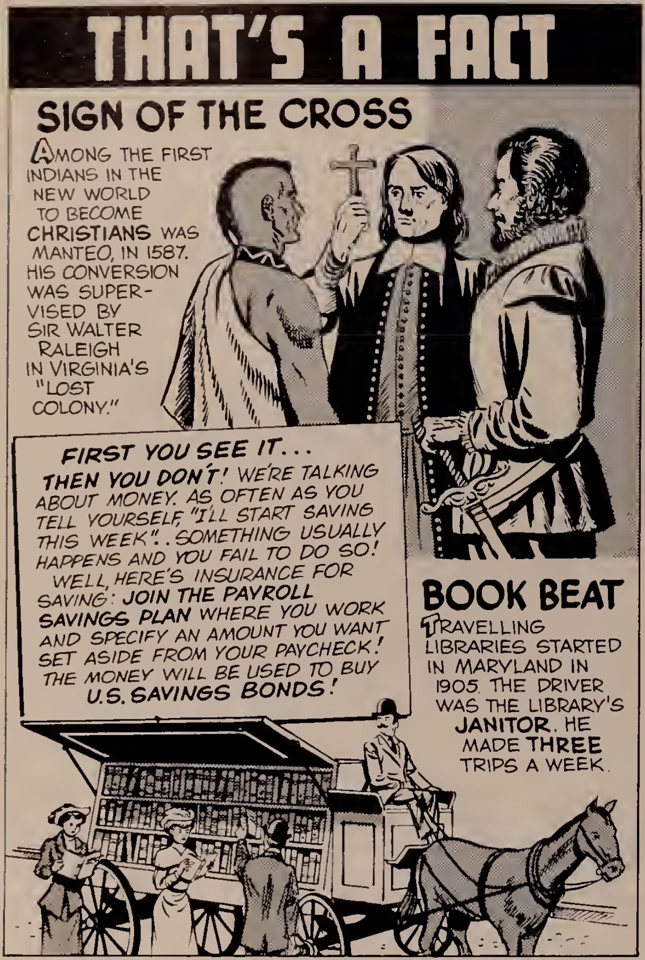
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SIGN OF THE CROSS
AMONG THE FIRST INDIANS IN THE NEW WORLD TO BECOME CHRISTIANS WAS MANTEO, IN 1587. HIS CONVERSION WAS SUPERVISED BY SIR WALTER RALEIGH IN VIRGINIA'S "LOST COLONY."
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TRAVELLING LIBRARIES STARTED IN MARYLAND IN 1905. THE DRIVER WAS THE LIBRARY'S JANITOR. HE MADE THREE TRIPS A WEEK.

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Books Reviewed

Advances in Perinatal Medicine. Edited by Aubrey Milunsky, M.D., Emanuel A. Friedman, M.D., and Louis Gluck, M.D. New York, Plenum Medical Book Co., 1982. Volume 2. Illustrated, 384 pages. Cloth, $39.50.

Advances in Perinatal Medicine (vol.2) is written by pediatricians who are internationally known for their academic contributions to the field of neonatal-perinatal medicine, with contributions from experts in pediatrics, perinatology, nutrition, pulmonology, social services, and obstetrics.

The six chapters deal with subjects that are of interest not only to perinatologists, but also to those from other related disciplines. Each chapter has been written with special focus on recent progress. The impact that other disciplines have on the field of perinatology becomes quite obvious as one reads through the pages of this volume. The chapter on "Fluoride in Pregnancy" is a particularly thorough and comprehensive review, with 163 references. The subject matter deals with every aspect of fluoride metabolism, including the public health application.

Among the other chapters in this book, the ones that are outstanding and up to date are "Role of Placenta in Perinatal Mortality," "Diabetes in Pregnancy," and "Human Milk as Food." Chapters on "Barotrauma to the Lung and Family Crisis in the Newborn Special Care Unit," although good reviews, contributed comparatively little new information to this reviewer.

Because of the variety of subject matters discussed in this volume, the book will be of benefit to all those concerned with an optimum outcome of pregnancy, and is strongly recommended for those who are actively working in the field of perinatology. **S. G. Laungani, M.D.**

Scientific Foundations of Anaesthesia. Third edition. Edited by Cyril Scurr, CBE, MVO, FRCS, FFARCS, and Stanley Feldman, BSc, MB, BS, FFARCS. Chicago, Year Book Medical Publishers, Inc., 1982. Hardcover, $74.50.

The editors of *Scientific Foundations of Anesthesia*, Dr. Cyril Scurr and Dr. Stanley Feldman, are both consultant anesthetists in the United Kingdom. They invited 50 experts in the various subspecialties in anesthesia and the basic sciences to write this book. The authors are primarily British, although there are eight American contributors.

This third edition contains 57 chapters, grouped into five sections. These sections cover physical, physiologic, and pharmacologic principles, to which have been added anesthetic apparatus and a section that discusses computers, monitoring, statistics, environmental hazards, and measurement of electrical signals. It contains a scholarly dissertation of these subjects but avoids the discussion of clinical problems.

(continued on page 14)

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J-9043-4 July 1981

Medical News

Material for inclusion in medical news section must be received eight weeks prior to publication date.

ASIM new president

Monte Malach, M.D., has been installed as president of the American Society of Internal Medicine.

NCA names new medical director

Sheila B. Blume, M.D., has been named medical director of the National Council on Alcoholism.

High Court physician-attorney

Arthur T. Davidson, M.D., esq., has been recently admitted to the Bar of the U.S. Supreme Court and is entitled to practice before the High Court.

ACS names new officer

Gerald P. Murphy, M.D., director of Roswell Park Memorial Institute in Buffalo, has been elected vice president and president elect of the American Cancer Society. He is the first ACS president-elect from New York State.

Double appointment

Anne C. Carter, M.D., has been appointed director of Ambulatory Cancer Detection Services and attending physician in the Department of Medicine at Westchester County Medical Center with a simultaneous appointment as professor of medicine at New York Medical College.

American Medical Women's Association, Inc. elects Councilor

Lila A. Wallis, M.D., F.A.C.P., was elected Councilor for Growth and Development of the AMWA.

New How-To-Book

In September, 1982 the Institute for Scientific Information (ISI) press will publish *How to Write and Publish Papers in the Medical Sciences* by Edward J. Huth, editor, *Annals of Internal Medicine*. This new book is a practical, detailed guide through all the steps in getting a paper published in clinical journals of medicine and closely related fields including clinical pharmacy, dentistry, nursing, and veterinary medicine. The steps range from deciding to write, through planning and writing the paper, to submitting the paper and responding to the editor's decision.

Facts, Figures, and Fillers

The average malpractice award against doctors is about two and a half times what it was in 1975, but awards against hospitals are five times higher. In cases where doctors and hospitals are codefendants, awards have nearly tripled. About 30% of the awards against hospitals and hospital-doctor-codefendants are $500,000 or more, but just 17% of the awards against doctors are that high.

Jury Verdict Research, Inc.

GM estimate of expense

General Motors (GM) spent an average of $3,270 per employee in health insurance premiums last year, or double the 1976 outlay. GM estimates that its health-care bill added about $370 to the cost of producing a car in 1981.

Time

Expenditures

	1950	1960	1970	1980
National Health Expenditures (in billions)	$12.7	$26.9	$74.7	$247.2
Hospital care (percent of total)	30%	34%	37%	40%
Nursing home care	2	2	6	8
Physician services	22	21	19	19
Dentist services	8	7	6	6
Other professional services	3	3	2	2
Drugs and drug sundries	14	14	11	8
Other health services and supplies	13	13	12	12
Health research and construction	8	6	7	5

Source: Health Care Financing Administration

NCHSR study

A study done for the National Center for Health Services Research (NCHSR) reports that, despite a rapid increase in the doctor supply nationally, one for every 578 persons compared with one for every 840 in 1960, growth remains slow in counties with populations between 10,000 and 25,000. In such rural areas there's just one doctor for every 1,763 persons, compared with one for every 1,765 in 1960; and counties with populations under 10,000 now have fewer doctors per person than they did then.

ISMA Reports

Awareness promotion

The Hemochromatosis Research Foundation, Inc., a membership and research organization, was formed to promote awareness that hereditary hemochromatosis is a common genetic disorder rarely diagnosed before clinically manifest, to prevent the associated chronic diseases by earlier case-finding, to form regional chapters and establish a national registry, and to solicit funds for prevelence studies and research. Interested physicians may contact: M. A. Krikker, M.D., PO Box 8569, Albany, New York 12208.

(continued on page 91)

Ativan®: (lorazepam) Agent of Change because...

Ativan®
Accumulation to steady state
extends for only 2-3 days.
No active metabolites.
Day 3
depiction of typical blood level
4
3
2
1

shorter acting, less accumulation

Unlike most benzodiazepines, Ativan has a short half-life, no active metabolites, and accumulation to steady state extends for only 2-3 days. Ativan is therefore less likely to cause excessive sedation.[‡]

no interaction with drugs metabolized by P450 enzymes

Because it is metabolized by simple conjugation rather than complex oxidative reactions, Ativan does not compete with other drugs for hepatic P450 microsomal enzymes. Concomitant use with Tagamet® (cimetidine), for example, does not result in delayed clearance or increased sedation[†]—effects which have been reported with other benzodiazepines.[1-5]

greater control of therapy

The short half-life of Ativan facilitates more rapid response to dosage adjustments, aiding you in titrating therapy to the patient's changing needs. Once you decide to discontinue Ativan, it will be out of your patient's system 4 days after the final dose—unlike the long-acting, multi-metabolite benzodiazepines which take as long as 2 weeks to be totally eliminated.

Wyeth Laboratories
Philadelphia, PA 19101

References:
1 Klotz U, Reimann I N Engl J Med *302*:1012-1014, 1980.
2 Desmond PV, Patwardhan RV, Schenker S, et al: Ann Intern Med 93:266-268, 1980.
3 Patwardhan RV, Yarborough GW, Desmond PV, et al: Gastroenterology *79* 912-916, 1980
4 Sellers EM, Naranjo CA, Peachey JE N Engl J Med *305* 1255-1262, 1981
5 Ruffalo RL, Thompson JF Segal JL: South Med J *74*:1075-1078, 1981

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[‡] Pharmacokinetics cannot as yet be directly related to efficacy.

[†] All benzodiazepines produce additive effects when given with CNS depressants such as barbiturates or alcohol

See important information on following page.

Ativan® for (lorazepam) Ⓒ IV Anxiety

Brief Summary of Prescribing Information.

Indications and Usage: Management of anxiety disorders or short-term relief of symptoms of anxiety or anxiety associated with depressive symptoms. Anxiety or tension associated with stress of everyday life usually does not require treatment with an anxiolytic.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

Ativan®
for (lorazepam)
Anxiety

Dosage: **Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.**

How Supplied: **0.5, 1.0 and 2.0mg tablets.**

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(continued from page 10)

The text is well written and amply illustrated. This reviewer recommends it highly for students and instructors. It should be purchased by libraries and departments of anesthesia. Most clinicians will probably not wish to invest $74.50 at this point. **Edith R. Kepes, M.D.**

Introduction to Clinical Radiology. By Wallace T. Miller, M.D. New York, Macmillan Publishing Co., Inc., 1982. Illustrated, 291 pages. Hardcover, $24.50.

I have taken the opportunity of discussing the material in this book with an undergraduate teaching faculty, and am herewith reporting some of the feelings that have come about after both reviewing the text and using it with medical students.

It was the consensus that the text is more suitable for advanced students than for the true novice. The text is succinct but does not afford the reader enough explanatory references for the illustrations at hand, most of which are presented as problems with brief clinical data. A disadvantage is the listing of the answers and detailed radiologic discussion at the back of the book.

The 250 illustrations are generous in size and carefully chosen. However, the roentgen findings in a good many will have to be taken on faith since they are not readily obvious on the printed page.

Short discussions of all current modes of imaging are included, although these are too brief to allow a genuine understanding by medical students. The heavy black lines used to indicate structures are distracting and a few of the illustrations have been badly cropped. In general, the content is quite up to date and clinically clear, although no mention is made of echocardiography in the discussion of pericardial effusion.

The author's concept to use the illustration as a review is not workable for students. A particular radiograph, once carefully examined, is recalled visually for years and the pathology is recognized more readily than it would be from unfamiliar material. This process, as a review mechanism, is also not practical for resident level teaching.

I hope that these comments are helpful to you. All the faculty thank you for the chance to review this interesting undergraduate text. **Joshua A. Becker, M.D.**

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A call to remembrance

I have been asked to write an editorial for the Journal of the Medical Society of the State of New York commemorating its 175th Anniversary. In looking for source material for this editorial, I came across the minutes of the first meeting of this great Medical Society, which occurred in 1807, and I am having those minutes reprinted here for the edification of our members and other interested readers. I strongly recommend that careful attention be paid to these minutes because, although they are not extensive, they do iterate in no uncertain terms the purpose of this Society and explain some of the reasons why it has persisted through the years.

> **Transactions of the first meeting of the Medical Society of the State of New York, February 1807.**
>
> The statute enacted on the 4th of April, 1806, by the honorable the Legislature of this State, to incorporate Medical Societies, for the purpose of regulating the practice of physic and surgery may be considered as among the first efforts made in this country, to give to the Medical Profession an honorable station in the community.
>
> By investing the privileges of medical men in corporate communities formed of the members of that profession, the public may be freed from many impositions, and the usefulness and importance of the healing art will be extended. This history of all the learned professions imperiously proves this fact, that no one of those professions has ever become respectable or extensively useful to mankind, that was not under the restraint of the great body of its own members.
>
> Mankind have, in all ages and in all communities been too often deceived by men who pretended to professional merit, and who by mean practices on the ignorance, follies and caprices of individuals, have gained an artificial importance in society. This is more especially the case in the medical profession. Hence the importance of the law, placing the regulation thereof under incorporated Medical Societies. The advantages to the community in placing the regulation of the medical profession under the direction of its own members, is already sufficiently manifested, by the promotion of medical education, the encouragements given to physical inquiries and observations, and the diminished influence of pretenders to the healing art, throughout the State.
>
> The Medical Society of the State was duly organized on the first Tuesday in February, 1807, when the following members were chosen officers:
>
> William M'Clelland, President
> Alexander Sheldon, Vice-President
> Moses Willard, Treasurer
> John Stearns, Secretary
>
> Censors
>
> John M. Mann, Columbia
> William Wheeler, Dutchess
> Lyman Cook, Westchester
> Moses Willard, Rensselaer
> Caleb Samson, Oneida
>
> Committee of Correspondence
>
> David R. Arnell, Orange
> John Ely, Greene
> Westell Willoughby, jun., Herkimer
> Alexander Sheldon, Montgomery
> John M. Mann, Columbia
>
> The Society enacted certain by-laws, and agreed to apply to the Legislation to divide the members of the Society into classes, and to make some provision for the support of the Society. They examined and licensed some candidates for the practice of physic and surgery.
>
> At this early period of the establishment of the Society, it was considered proper to extend its usefulness in promoting medical inquiries in the different counties in the State. Accordingly each member of the Society was directed to present a geological and topographical description of the county in which he might practice, and also a history of such diseases as might prevail in his particular place of residence; and that each member should give an account of any remarkable case that might occur in his practice, together with its treatment, at the anniversary meetings of the Society.
>
> The Society then adjourned to meet on the first Tuesday in February, 1808.

I am often asked by nonmembers why they should belong to the Medical Society of the State of New York, and for that matter to either their county medical society or the American Medical Association. My answer has never varied throughout the long years of association I have had with this Society. I have a standard answer and it does not refer to membership benefits or other mundane reasons but to the simple statement that physicians should belong to this Society because they are physicians and require a single solitary organization to represent them regardless of specialty or the type of practice. It has been said before, and perhaps better than I could say, that if the Medical Society disbanded for whatever reason, a group of men and women would then probably get together and form a new society.

I should now like to draw your attention to some of the remarks made in the text of the first meeting of this Society. I would like to quote from the second paragraph which states that "This history of all the learned professions imperiously proves this fact, that no one of those professions has ever become respectable or extensively useful to mankind, that was not under the restraint of the great body of its own members. Mankind have, in all ages and in all communities, been too often deceived by men who pretended to professional merit, and who by mean practices on the ignorance, follies and caprices of individuals, have gained an artificial importance in society."

I suppose that simply stated this is a very strong argument for ethical standards and for peer review.

The first minutes then draw attention to the importance of the law of 1806 which incorporated this medical society by "*placing the regulation thereof under incorporated Medical Societies.* The advantages to the community in placing the regulation of the medical profession under the direction of its own members, is already sufficiently manifested, by the promotion of medical education, the encouragements given to physical inquiries and observation, and the diminished influence of pretenders to the healing arts, throughout the State."

Here again is a further manifestation of the role of medicine in fighting against quackery and for continuing medical education.

The aforementioned text chronicle events that took place in 1807, and in the past 175 years there have been no dramatic changes in the role of medical societies except that in the great state of New York we have taken away the power of examination, licensure, and punishment from the Medical Society and placed it in the hands of the Board of Regents. I personally feel that this has been a step backwards in the evolution of quality health care in this state and that somehow or other we must go back and give the authority to the profession itself. As a matter of fact, I think the Regents should hand over to every licensed discipline in this state the power to discipline themselves and be held publicly accountable as to whether they do the job or do not do the job. It is a great tribute to the legal profession that they have been able to keep for themselves the very power that was given to the Medical Society in 1806. I will not further elaborate on this fact.

One of the great conclusions I have drawn is that given the opportunity, the medical profession is probably harder on itself in the terms of discipline and quality health care than other agencies have been. I am convinced in my own mind that quality health care would be enhanced in this great state if capability of self examination, discipline, and punishment were given back to the medical profession where it rightfully belongs. The present State Board of Medicine is a very viable, intelligent, and knowledgeable group of physicians who, in my opinion, can certainly judge and mete out discipline for those physicians guilty of unprofessional conduct.

For what it is worth, it would be a great page in the history of this Society and in health care for all the citizens of New York if, at some future date, the proceedings of the Medical Society of the State of New York could echo those historic minutes of 1807.

EDWARD SIEGEL, M.D.
Executive Vice President
MSSNY

Selected scientific articles

In closing this last 25 year period of our 175th Anniversary Year, the Journal editors take pleasure in publishing again three of its many outstanding scientific articles. The authors of these articles were recipients of our Laurence D. Redway Award for excellence in scientific research and writing.

The article "Rh Immunoglobulin in Prevention of Hemolytic Disease of Newborn Child" by John G. Gorman, M.D. was originally published in our May 1968 Journal. It addresses the still current problems of prevention of hemolytic disease.

Two articles were published as a "*Symposium on the Immune System, Membrane Receptors, and Genetics of Cells Involved in the Immune Response*". The article "Immune System: Introduction" was written by Thiruchandurai Rajan, M.D., and the article on "Membrane Receptors and Genetics of Cells Involved in Immune Response" was authored by Steven H. Zuckerman (at that time a predoctoral student), and Steven D. Douglas, M.D. originally appeared in our July 1976 Journal.

These articles represent investigations and advances in molecular biology, biochemistry, and genetics. They record the "state of the art" of their time in the overall review of immunobiology concerned with the genetics of cell types and the role of plasma membrane receptors in determining the immune response.

It was then, and still is, our hope that these articles provide a basis for an introduction and consideration of the more recent developments in immunology and genetics.

A.A.A. ■

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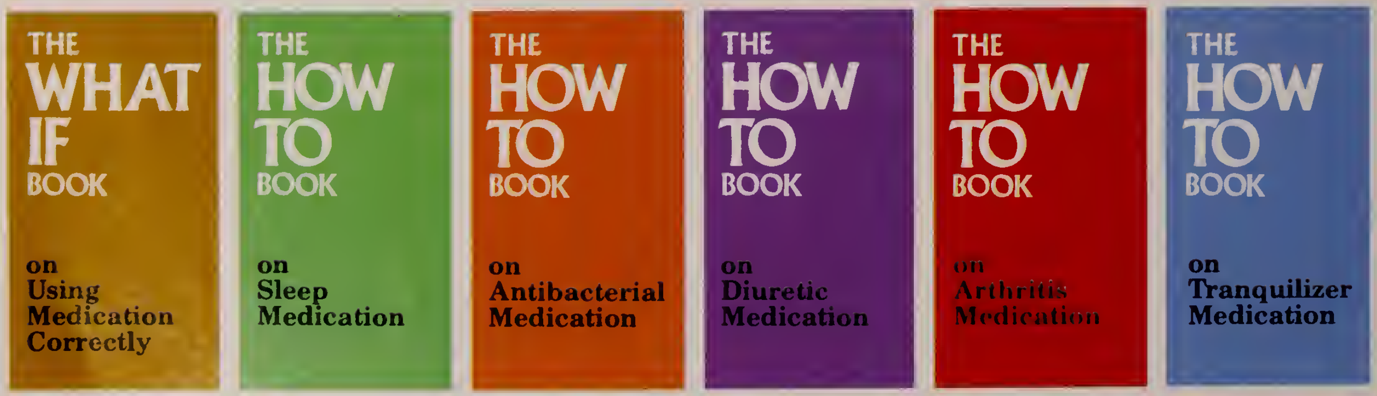
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SYMPOSIUM

Immune System, Membrane Receptors, and Genetics of Cells Involved in Immune Response

Introduction

The investigations during the past two decades and advances in molecular biology, biochemistry, and genetics have contributed to the formulation of modern concepts of immunobiology. The understanding of lymphoid cell function has been of major importance in characterization of normal and altered physiologic states. These studies have increased our awareness of this model biologic system and has provided important insight as to how an organism must evolve at the molecular level to survive in a hostile environment.

In the following two articles there is first presented an overall review of immunobiology and then, in detail, an area of immunobiology concerned with the genetics of lymphoid cell types and the role of plasma membrane receptors in determining the immune response. It is our hope that these articles will provide a basis for an introduction and consideration of recent developments in immunology, genetics, and molecular medicine. Following the second article will be found a glossary which the reader may find useful.

A. A. A.

Immune System*

Introduction

THIRUCHANDURAI RAJAN, M.D.
The Bronx, New York

Assistant Professor of Pathology, Albert Einstein College of Medicine

From its beginning as an applied, largely empirical discipline devoted to the prevention and treatment of diseases, immunology has now come to occupy a major position among the basic biologic sciences, promising insights into two areas of inquiry that have most consistently fascinated man: embryology and cancer. In the field of embryology, the programmed differentiation of the lymphocyte from a resting cell to a highly differentiated cell can be regarded as a model for the general phenomenon of morphogenesis; moreover, the interactions of various subpopulations of lymphocytes may provide insights into the interactions between the embryonic inducers and the tissues they influence. In the area of neoplastic disease, the immune system is now widely accepted as the body's major defense against cancer. Thus, a detailed study of the functioning of this system should provide us with important leads into the origin and spread of the neoplastic cell.

Structure and function

Essential to any understanding of modern immunology is the appreciation of what Medawar[1] has called the "uniqueness of the individual." This uniqueness involves not only the gross external fea-

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* Supported by grant VC-198 from the American Cancer Society.

tures such as shape of the nose, color of the eye, and so on, but also the molecular level. Thus, the mammalian genome is made up of about 3 times 10^9 base pairs of DNA (deoxyribonucleic acid), sufficient to code for several tens of thousands of proteins. Each protein has its own unique shape, a shape that is determined by the primary amino acid sequence. This sequence determines how the completed polypeptide chain will fold to assume the functional three-dimensional conformation. Since all known proteins show some heterogeneity in primary sequence, any given protein can assume a variety of alternative conformations, all of which are compatible with normal function. These alternative conformations are often only very slightly different from each other. Thus, the replacement of a single amino acid for another along a peptide chain of, say 500 amino acids, can change, at the site of the replacement, the folding of the polypeptide chain. The result of this large repertoire of proteins, each with alternative forms, is the generation of uniqueness at the molecular level. In addition to proteins, certain polysaccharides also contribute toward the individuality of every member of the mammalian species.

In the context of this uniqueness, the function of the immune system is easy to state, at least at the broad, conceptual level, although many of the details remain to be understood. The immune system is that part of the mammalian organism that is involved with the discrimination of body constituents into those whose structure is determined by the host's own genetic information and that which is not. To put it more succinctly, it distinguishes "self" from "non-self"; having determined this, it rids the body of "non-self."

It follows from this that there will be a lower limit to the size of any material before it can be recognized as foreign, since in general, informational content increases with size. To illustrate this point, a single amino acid or a dipeptide has not enough information inherent in it for any monitoring system to discover its origin; clearly a dipeptide can just as well be from a mouse as a virus. However, when a peptide is larger, say 20 amino acids long, its sequence will become sufficiently complex so that the immune system can now determine whether it is self or non-self. Exceptions to this are small molecules that are entirely synthetic and do not occur naturally in the host, such as dinitrophenol. These compounds are foreign to living tissue and do provoke an immune response; however, to do so, they must first be attached to a larger molecule that must in itself be capable of being recognized as foreign. This need for two determinants is in fact a fail-safe mechanism within the immune system. Through the process of random mutations, a host protein may undergo a single amino acid substitution; however, this may fail to be detected as foreign unless a second mutation occurs at a different site in the protein. The statistical possibility of this occurring would be low. This will then allow the body to function with a mutated protein that might perform critical functions.

The discussion here brings us to two operative definitions.

1. Any substance that can provoke the immune system is called an antigen or more correctly an immunogen. Most large proteins are immunogens; many polysaccharides and some nucleic acids are also immunogens. Clearly foreign invaders, such as bacteria or viruses, are also immunogenic, since they are merely collections of non-self proteins, polysaccharides, and nucleic acids. Small synthetic molecules that are immunogenic only when attached to larger molecules, usually proteins, such as the dinitrophenol molecule discussed here, are called haptens. The immunogen carrying the hapten is called a carrier.
2. The response of the immune system to the immunogen is called, appropriately enough, an immune response. The immune response often has two components that perform somewhat different functions which are, however, teleologically directed toward the same goal: to rid the body of non-self material.

Components

Our understanding of the cellular basis of the immune response has been relatively recent, and is, in fact, far from complete. Many aspects of the function of the immune system became known before dissection of the structural basis became possible. However, we will attempt to present the anatomic basis first to achieve some semblance of continuity.

The central cell of the immune system is the small lymphocyte. A photomicrograph of this cell is shown in Figure 1B in the Zuckerman and Douglas report, page 1086. This is a small round cell, measuring from 8 to 12 microns, with a large nucleus and scant cytoplasm. Physiologic studies have shown that the cell makes little RNA (ribonucleic acid), protein, or DNA. It is thus a resting cell. The small lymphocyte, however, is a mobile cell, capable of moving in and out of the vascular tree. Microcinematographs have shown that the cell can move through the cytoplasm of the capillary endothelial cell into the interstitial fluid. From the spaces, the lymphocyte migrates through the lympatic vessels and through the thoracic duct back into the vascular system. Clearly this motility is a highly valuable property in an evolutionary sense, since it allows the lymphoid system to monitor the entire body.

Although all organs of the adult body contain them, the ultimate source of all the animal's lymphocytes is the bone marrow. The cell that originates from the marrow appears to be a very primitive cell, and has to migrate through what we call the primary lymphoid organs before it can become a functional entity. In birds there are two such primary lymphoid organs: the thymus and the bursa of Fabricius. In mammals, the thymus is a primary lymphoid organ and is analogous to the avian thymus; the mammalian equivalent of the bursa has not been determined and may, in fact, not exist as an anatomic entity; the bone marrow may itself function as a primary lymphoid organ and fulfill the role played by the avian bursa.

One of the questions that remains unanswered is whether there is a single population of primitive lymphocytes which can migrate through either the thymus or the bursa; or whether there are two different sets, one destined to the thymus, the other to the bursa. This question is of interest, since the two populations of lymphocytes that emerge from the primary lymphoid organs are very different functionally and anatomically. Thus the lymphocyte that emerges from the thymus, called the T cell or thymus-dependent cell, is "committed"* toward the development of cellular immunity; a cell that has passed through the bursa or its mammalian equivalent is called a B cell, for bursa or bone marrow-dependent cell, and is programmed to differentiate toward the production of humoral immunity. It is important to point out that passage through the primary lymphoid organ is an essential but not sufficient condition for the expression of immune functions. In addition, the lymphocyte has to interact with immunogen before function is expressed.

The functions of the primary lymphoid organs have been determined through observations on animals that have had them extirpated. Removal of the bursa in a newborn chick abrogates the chick's capability to make antibodies, although it retains the ability for mounting cellular responses. Similarly, removal of the thymus abolishes cellular immunity and a number of antibody responses, but antibodies to some immunogens continue to be made. The clinical picture resulting from removal of the thymus or bursa resembles that observed in children with various immune defects.

Several questions remain to be resolved about the functions of the primary lymphoid organs. How do these organs influence the lymphocytes that migrate through them? Recently, two different groups have isolated putative hormonal activities that can replace the thymus. On the other hand, many earlier experiments seemed to suggest that cell-cell contact between the lymphocytes and the epithelial cells of the lymphoid organs is critical for the development of commitment. Do the lymphocytes have to undergo mitotic divisions to become committed? While there is no direct information on this point, the thymus is in fact one of the organs with the highest mitotic index. Only a fraction of the dividing cells seem to emerge from the thymus. This, while suggesting that considerable mitotic activity does occur in the thymus, does not tell us whether it is essential for commitment. Finally, what exactly is the nature of the alteration induced by the primary lymphoid organs?

The answer to the last question is not known. However, several interesting changes do occur in lymphocytes during their stay in the primary lymphoid organs. The significance of these changes is not yet clear. The best characterized seem to involve constituents of the plasma membrane. Thus, mouse thymic lymphocytes contain, on the surface membrane at least, two sets of immunogens not present in other lymphocytes. One of these, called theta or Thy 1, is found on all T lymphocytes and has become an important distinguishing feature of this group of lymphocytes.† The level of expression of this antigen is highest in those T cells that have just emerged from the thymus and decreases progressively as the cell ages. Another surface antigen is Tla, also a mouse T-cell marker. However, not all mouse strains express this antigen. Recently a complex system of antigens called the Ly series has been discovered. The expression of one or the other of the Ly antigens appears to be closely related to one or the other of specific T cell functions. The subject is too complex to be reviewed here, and the reader is referred to a recent analysis of the system by Cantor and Boyse.[2]

The human analogues of theta, Tla, and Ly are not as well characterized as the mouse antigens.

The important B cell marker is surface immunoglobulin. Lymphocytes that have not migrated through the bursa do not synthesize immunoglobulins, but begin to do so in the bursa. In contrast with theta, Tla, or Ly, the significance of immunoglobulin expression is understood and will be discussed here.

Having matured in the primary lymphoid organs, the committed lymphocytes migrate to the spleen, lymph nodes, and the mucosa of the respiratory and gastrointestinal tracts. A majority of T cells, however, seem to be perpetually mobile, wandering in and out of the vascular tree as has been discussed. At this point in their differentiation, lymphocytes are still resting cells and do not synthesize DNA until their encounter with the appropriate immunogen.

In addition to lymphocytes, macrophages, the primary phagocytic cells of the body, seem to play an important role in the immune response. They could function by concentration of particulate antigens through phagocytosis and presentation of appropriate immunogenic moieties to lymphocytes. Other motile cells of the body, such as the basophils, may also be involved in some types of immune reactions.

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* Commitment is a term used widely in embryology. Thus, a primitive mesodermal cell can become a chondrocyte or an osteocyte. It is believed that under the appropriate stimulus, the primitive multipotent cell can be made to travel the pathway toward a specific differentiated end cell. This primitive cell, poised on the brink toward the differentiated state, is called a committed cell. While the expression strongly implies an irrevocable decision, there is in fact no evidence that a cell committed to becoming, let us say, an osteocyte, cannot instead become a chondrocyte. Commitment does not imply an inexorable progression of events. The committed cell can pause for any length of time at any stage. For instance, the female mammal is born with oocytes that are committed to become ova, but do not complete the last step of differentiation until the onset of puberty.

† While theta is not expressed by non-T lymphocytes, it occurs in large quantities in the brain and in some cells of the skin.

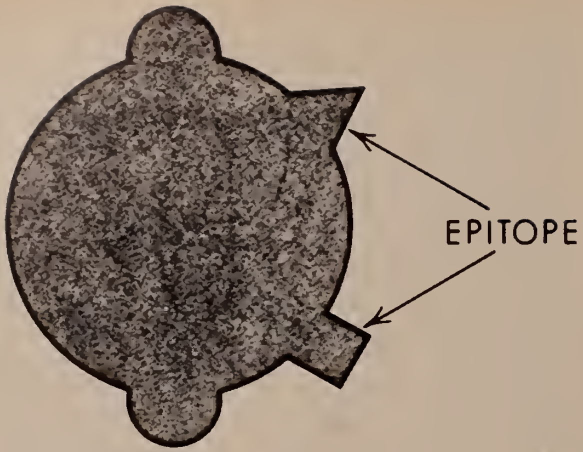

FIGURE 1. Antigen molecule traditionally represented by ball-like figure with projections of various shapes protruding from it. In this representation, body of ball is carrier part of antigen. Protuberances are epitopes. Antigen molecule thus has more than one epitope on it. Since any given antibody molecule can recognize only one epitope, many different antibody molecules can bind to single antigen, making it multivalent.

Immune response

Exposure to antigen. Around the turn of the century, Paul Ehrlich suggested a model for the immune response (Fig. 2 in the Zuckerman and Douglas report, p. 1086). He envisaged the cells of the immune system carrying on their surface, receptors capable of binding immunogen. This would cause the cell to synthesize more receptors and secrete them into the intercellular fluid. The modern extension of this hypothesis is called the clonal selection theory, and was enunciated by Burnet.[3] In essence the theory states that:

1. The immune system of a virgin* animal is composed of a large number of lymphocytes. Each lymphocyte is capable of making one, and only one, type of receptor. An idea that might be introduced here is that of an epitope in the sense in which it is used by Jerne.[4] An epitope is a single immunogenic component on a protein or polysaccharide. The easiest way to conceptualize an epitope is to use the familiar representation of an antigen (Fig. 1). Here the entire sphere with the various projections from it represents the antigen molecule; each projection is an epitope. Note that the antigen can have more than one epitope of the same shape. Thus, a protein has many different epitopes. Using this term, each virgin lymphocyte can react with one and only one epitope.
2. Different lymphocyte receptors bind different epitopes.
3. When a lymphocyte comes in contact with its appropriate epitope, not only does it not synthesize more receptors, but it also undergoes mitotic divisions to yield a clone. Some cells of this clone differentiate toward cells specialized to secrete receptors; others persist as resting, memory cells. This expanded population of cells can then react in an augmented way on reexposure to the antigen.

It is clear from this necessarily simplified statement of the clonal selection hypothesis that the immune system is characterized by a redundancy in its response to any antigen. Thus, in the ontogeny of any individual, it would be impossible to predict, in any sentient way, the immunogens that the individual will face. Again, since any unknown immunogen may be potentially lethal, all possible epitopes will have to be dealt with. This results in the first axiom that the immune system is blind. Any given epitope has a probability of meeting an appropriate receptor in the immune system. However, as a consequence of the blindness of the system and lack of prior knowledge of the epitope, the receptors of the system will achieve varying degrees of fit. This results in the second axiom, namely the redundancy. It is very important to point out that when we talk of an anti-albumin antibody, we are merely using an operational definition. The antibody that reacts with an epitope on albumin merely happens to do so; an epitope of the same shape on a totally different protein or, for that matter, polysaccharide, will evoke the production of that same antibody.

Response of the B-cell lineage. We shall first discuss the response of B cells to immunogens. For the sake of simplicity, we shall assume that they act independently of the rest of the immune system, although this is not true for most immunogens. The few for which this is true are called T-independent antigens. These would seem to be able to evoke a pure B-cell response. They have two interesting properties. All T-independent antigens are long polymers of identical units, examples being polyvinylpyrrolidone, flagellin, and some bacterial wall polysaccharides; and they are resistant to host enzymes and are very slowly degraded. The following events occur when an immunogen is administered, say by subcutaneous injection:

1. The immunogen is picked up by lymphatics and transported to the regional lymph nodes.
2. If it is particulate, it is presumably ingested and degraded by the phagocytic cells of the lymph node framework. These cells may also concentrate epitopes and present them to the surrounding lymphocytes.
3. In a virgin animal, an antigen can bind with about 10^{-4}, or 1 in 10,000, lymphocytes. Presumably, these lymphocytes are those whose surface receptors can bind the epitopes on the immunogen. Once this binding occurs, the resting lymphocyte is activated. It begins to make protein, RNA (ribonucleic acid), and, after a small lag, DNA. This is associated with the appearance in the lymph node of large cells called blast cells which are merely small lymphocytes that are actively dividing.

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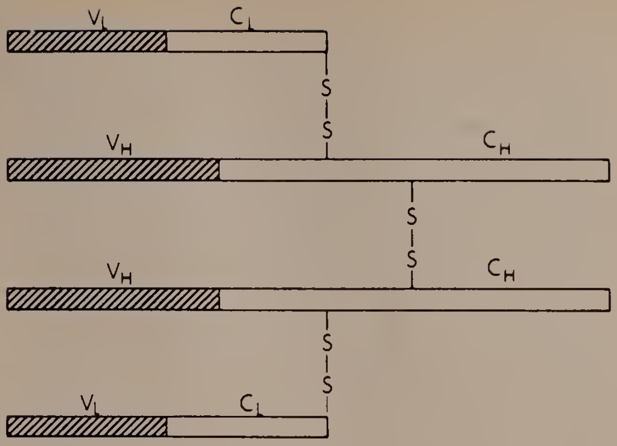
* This term, virgin, is used here in an immunologic sense rather than in its more common connotation. Thus a virgin animal is either the newborn animal, or one raised in an immunogen-free environment. Similarly a virgin lymphocyte is one that has not come in contact with the immunogen appropriate to it.

4. After a few cell divisions, some of these newly formed cells proceed to differentiate toward a new type of cell called a plasma cell. These cells, as opposed to the resting lymphocyte, have a large amount of cytoplasm and an extensive endoplasmic reticulum. Unlike the small lymphocyte, however, they are short lived. During their life span, they synthesize and secrete large amounts of the receptor, which begins to appear in the blood about two weeks after the first exposure to the immunogen.

The B-cell receptor. One of the seminal advances in the development of molecular immunology was the detection and characterization of the B-cell antigen receptor. An enormous and exciting literature exists on this receptor, which was shown to be of a special class of proteins now called immunoglobulins, abbreviated commonly as Ig. Igs have attracted the attention of immunologists, evolutionary biologists, protein chemists, and x-ray crystallographers. It is not possible to summarize adequately the published material available on these proteins in this review. What follows is, therefore, a brief description of the structure and function of immunoglobulins.

All immunoglobulins described have a common basic structure. They are composed of four polypeptide chains, linked by disulphide bonds. Two of these are made up of about 220 amino acids each, and are called light or L chains; the other two contain about twice as many amino acids and are called heavy or H chains. In all naturally occurring Igs, the two light chains are identical with each other as are the two heavy chains. The molecule is thus perfectly symmetrical in one axis, each half being composed of an L chain linked to an H chain. The two halves, referred to as HL, are linked to each other through inter-heavy chain disulphide bonds. The two light chains of an Ig molecule are thus not linked to each other directly, but only through the heavy chains. All four N terminals are at one end of the molecule and the C terminals at the other end. Either the ultimate, that is C terminal, or penultimate amino acid of the L chain is a half-cystine and is linked to a half-cystine in the middle of the heavy chain (Fig. 2).

The epitope binding area of the Ig molecule is made up of the N-terminal 110 amino acids of the heavy and light chains. Each heavy chain, together with the L chain, forms one antigen-binding site. Consequently, the Ig monomer has two identical antigen-binding sites. The shape and size of this binding or combining site have recently been determined by x-ray crystallography, and the data indicate that the crevice formed by the folding of the two polypeptide chains varies greatly from molecule to molecule. This variation is determined by the presence of the so-called hypervariable regions in the L and H chains. These are regions in the chains, 3 in L chains and 4 in H chains, about 5 to 10 amino acids in length, that vary very greatly in amino acid sequence. Affinity labeling experiments suggest that those sequences are in the region of the combining site of the Ig molecule.



ANTIBODY MOLECULE

FIGURE 2. Regions of immunoglobulin G molecule. Variable (V) regions shaded; constant (C) regions unshaded. V_L and C_L are variable and constant regions of light chain; V_H and C_H are those of heavy chain. Amino acids numbered starting from amino terminal variable end of peptide chains. Variable part of chains extends to 110th residue on each chain.

While the N-terminal 110 amino acid sequence of both L and H chains are highly variable, the rest of the chains are relatively constant. The C terminal half of the L chains fall into two classes, called kappa and lambda. Within any given class, the C-terminal half tends to be essentially identical; however, the kappa and lambda classes are homologous only at about 60 per cent of their residues.

The C-terminal 300 odd residues of the H chains can be divided into three segments of about 100 amino acids each.* Near the middle of the heavy chain is the hinge region, distal to which are the inter-heavy chain disulphide bonds. The hinge region contains many proline residues, making the region very flexible. This flexibility allows the two epitope binding sites, that is, the N-terminal half of the H chain with the associated L chain, to move independently of each other, allowing the Ig molecule to assume a Y-like shape. The region of the H chains that forms the base of the Y is called Fc region; the antigen-binding arms of the Y are called the Fab regions.

Heavy chains constant regions fall into five major classes based on sequence and serology. Of those, the predominant class contains the gamma chain. Gamma heavy chains are 450 amino acids in length, and Igs whose heavy chains belong to the gamma class are called IgG. IgGs are monomeric, composed of a single unit of 4 polypeptide chains. IgA, composed of the alpha heavy chain with kappa or lambda light chains, is the next most abundant immunoglobulin. Most IgAs are secreted into the gastrointestinal, respiratory, tear gland, or mammary secretions, and hence, the serum concentration of IgA is rather low. Serum IgA is monomeric, but secretory IgA is dimeric and can occur in larger forms. In addition to H and L chains, secretory IgA contains two other polypeptide chains. These are called the J chain, for joining, and the secretory component. The J chain is found on all polymeric Igs and is perhaps responsible for holding the units together. The function of the secretory component, which is found only in secreted IgA, is not known but it could be responsible for the resistance of secretory IgA to digestive enzymes. The third class of H chains is the mu chain. The mu chain is longer than either alpha or gamma and is 550 amino acids in length. Igs containing mu chains are called IgM. Most IgMs exist as a pentameter, composed of 5 units of 4 peptide chains each; IgM may also exist as a monomer on the surface of B cells possibly functioning as the primary antigen receptor. There are reasons to believe that the mu chain is the evolutionary precursor of all Ig heavy chains; even in ontogeny, IgM appears before IgG or IgA.

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* One cannot fail to notice that the number 110, plus or minus a few amino acids, seems to be a recurring one in the Ig structure. In fact, sequence study has shown that all Ig polypeptides occur as units of a basic length of 110 amino acids which contain two half cystines capable of forming an intrachain S=S linkage folding the region into a globular structure. These 110 amino acid length regions are called domains. One of the very exciting new discoveries in immunology has been that of a protein called beta-2 microglobulin which is about 110 amino acids long and shares considerable homology with the heavy chain domains. While the function of B-microglobulin is still obscure, the facts that most mammalian cells seem to make it and that it is associated with the plasma membrane have led to the hypothesis that it might be the evolutionary precursor to the development of Ig molecules.

The two remaining heavy chain classes are less well characterized. IgEs contain the epsilon heavy chain. IgDs contain the delta heavy chain. There is some recent evidence that IgDs may coexist with monomeric IgM on the surface of B cells.

To recapitulate very briefly, the antigen-binding B cell receptor is a protein molecule made up of two identical H chains, which may be alpha, gamma, delta, epsilon, or mu, and two identical L chains, which are either kappa or lambda. The specificity of antigen binding is dictated by the shape of the crevice formed by the first 110 residues of these chains. The heterogeneity of the combining sites is the result of the variation in primary amino acid sequence in the so-called hypervariable regions.

The kinetics of the B-cell response. Following the administration of an antigen, specific Igs can be detected in the bloodstream beginning about a week after administration and peaking at about two weeks. The B-cell response plays an important role in "humoral" immunity. The method of administration of an immunogen is critical in the kinetics, type, and intensity of the immune response. Thus, soluble proteins in dilute buffer salts evoke a rapid but transient response; the same protein adsorbed onto an inert, insoluble support, like precipitated alum or in a water-in-oil emulsion, evokes a slower but more intense and prolonged response. Oral administration of antigen, such as the poliomyelitis vaccine, produce predominantly IgA responses. The dose of immunogen required for a full-fledged immune response varies from immunogen to immunogen and with the method of administration. As little as 1 microgram of a protein can evoke the production of antibodies if administered in a water-in-oil emulsion.

The first introduction of an immunogen in a virgin animal results in the production of a primary response. For most immunogens, the antibodies detectable within a few days of administration are predominantly IgM in nature. The response switches to the IgG class. As will be discussed here, the switch is dependent on a cooperative effort between B and T cells. Associated with this switch is an increase in the antibody affinity. The antibodies produced later in the immune response tend to have a greater affinity for the antigen. This phenomenon is of interest, but the explanation for it is not clear. It is presumed that as antigen concentration falls, there is enough left only to stimulate those clones whose Ig can bind more strongly. However, alternative mechanisms have been suggested.

If the first administration of the immunogen is also the last, the antibodies in the serum decline asymptotically. A second injection of the same antigen, however, provokes a vigorous reaction called the secondary or anamnestic response. This is characterized by a response characterized by a lower threshold for antigen, a shorter lag time, higher titer of antibody production, and longer persistence of antibody in the blood. Secondary responses can be elicited years after the first exposure to antigen. This is related to the persistence of so-called memory cells that were discussed earlier.

T-B cell cooperation. *Genetics of the immune response.* That T and B cells cooperate in the production of antibodies had been conjectured for a long time. For instance, thymectomy not only abolishes cellular immunity but also abrogates antibody production against a number of antigens. Over the last few years, this area of immunology has become the most exciting one in terms of new insights and ideas. Two developments have helped to define clearly the phenomenology of this cooperation and to approach its molecular basis. The more important of the two is the availability of a large number of strains of inbred mice. Individuals within a given strain are genetically quite identical, and this has greatly assisted our understanding of the genetics of cellular cooperation. The other is the synthesis of clearly defined, simple polypeptide antigens of known composition. A number of laboratories are now involved in the dissection of the role of cellular cooperation in the immune response, but those of McDevitt and Benacerraf[5] at Stanford University and of Katz and Benacerraf[6] at Harvard have pioneered many of the studies. The area of T-B cell cooperation is discussed in greater detail in the article by Zuckerman and Douglas that follows.

Response of the T-cell lineage. *Cellular immunity.* As has been discussed, the exposure of B cells to an immunogen results in the production of antibodies in blood. If blood or serum is removed from an immunized animal and transferred to a virgin animal, called passive transfer, the latter shows some of the signs of B-cell immunity. For these reasons, the B-cell response is called humoral immunity. Early in immunology, it became obvious that some types of immune responses could not be passively transferred with serum, but only with cells of the spleen or other organs of the immune system. These immune reactions were called cell-mediated immune reactions. It has become clear that all cell-mediated immune responses are mediated by T cells. Neonatal thymectomy abolishes this response in passive transfer. If the immune cells are first treated with anti-theta serum in the presence of complement, thus eliminating the T-cell population, immunity is not transferred. The following reactions are now known to be due to T cells:

1. Delayed hypersensitivity.
2. Resistance to many intracellular parasites.
3. Rejection of transplants.
4. Some drug allergies and anti-immune phenomena.
5. Possibly, tumor immunity.

The last will be discussed in greater detail in the following section.

T-Cell Functions. The T-cell receptor has not yet been characterized. There is some evidence that the Ir genes, reviewed in the following report, may be the T-cell antigen receptor. However, the library of such receptors would seem to be rather too limited to account for the sensitivity and selectivity of T-cell function. Furthermore, even nonresponder mice can be shown to have T cells that can bind antigen. It is unlikely, however, that Igs of the known classes are the T-cell receptors.

In the absence of knowledge about the nature of the T-cell receptor, the mechanism by which cell-mediated immunity occurs is not known. In general, the response of the T-cell lineage to immunogens is not overtly different from that of the B-cell lineage. Thus, T cells, on exposure to the appropriate immunogen, convert from resting cells to active cells that undergo blast transformation and begin to synthesize protein, RNA, and DNA. Although it is unlikely that T cells secrete significant amounts of immunoglobulin, they are capable of secreting other molecular species with possible effector functions including:

Migration inhibition factor (MIF). The migration inhibition factor, presumably a protein, prevents macrophages from moving out of the local area of a T-cell immunogen contact. In addition, macrophages become sticky, show signs of increased metabolic activity, and exhibit increased phagocytosis.

Lymphotoxin Lymphotoxin is another protein that seems to be able to lyse cells in the vicinity of activated T cells.

Blastogenic factor. The blastogenic factor is a protein that can cause other lymphocytes in the vicinity to undergo blast transformation.

Transfer factor. In human beings alone, lysates of T cells can transfer immunity. This transfer factor, presumably a small molecular weight protein, 10,000 daltons, appears to be able to transfer cellular immunity even to human beings who lack all thymic function. Despite repeated efforts, no other animal species has been shown to produce transfer factor. Further, this factor has eluded biochemical characterization, and indeed its biologic and clinical significance is controversial.

Unfortunately, the role of any of these factors in the known T-cell functions is far from clear.

As is the case with B cells, the incubation time, from exposure to immunogen to detection of immunity, is from four to fourteen days. At the end of this period, cellular immunity can be detected by in vivo tests, like delayed hypersensitivity, or in vitro assays, such as macrophage inhibition or the virus plaque assay. Unlike antibody titers, however, T-cell responses can be detected several years after sensitization and appear not to diminish quantitatively with time.

The delayed hypersensitivity reaction, the sine qua non of the T cell immune response, can be best demonstrated in guinea pigs or man. In either case, intradermal injection of antigen in a sensitized animal provokes erythema and edema in about ten to twelve hours. The edema subsides, but erythema and induration progress to peak forty-eight hours after injection. The induration is characteristic of the reaction.

The biologic role of the delayed hypersensitivity reaction in the skin is obscure. In severe cases, the reaction can proceed to necrosis of the surrounding tissue.

Presumably, this is due to the lymphotoxin discussed here, in addition to enzyme liberation from macrophages.

That T cells protect against a variety of intracellular parasites is clear, both from surgical removal of the thymus in neonatal animals and from observations on human beings born without a thymus. In many cases, this protection appears to be due to the activation of macrophages. Thus, macrophages from animals who have been sensitized with an intracellular parasite are more efficient both in ingesting and in digesting intracellular parasites. Mackeness[7] has shown this to be due to the presence of immune T cells in such animals. In viral infections, T cells may play a protective role through the secretion of interferon, an agent known to inhibit viral replication in cells.

The function of T cells is, however, best demonstrated by the use of transplants. One of the few rules in biology that appears to have no exceptions is that a healthy animal with intact T-cell function will reject a transplant from a genetically different animal.[*] On transplantation, the graft is quickly invaded by small lymphocytes which become sensitized. Beginning around the middle of the second week the graft begins to necrose and is quickly sloughed off. If the donor is now transplanted with a second graft, the process is accelerated, the graft being rejected four to six days after grafting in the process known as second-set rejection. By passive transfer, it can be shown that the effectors of graft rejection are T cells rather than antibodies.

To recapitulate briefly, T cells are involved in delayed hypersensitivity resistance to intracellular parasites and in the rejection of transplants. In addition, they perform an important role in the modulation of the B-cell response. The molecular basis of T-cell function is not known in most cases.

Tumor immunity. Around the turn of the century Paul Ehrlich suggested that the immune system is the major defense against cancer. Lewis Thomas formally enunciated the idea of immune surveillance and the possibility that the major telologic value of cellular immunity was to guard the body against tumors. Both he, and since him Burnet,[3] have suggested that all malignant cells bear surface antigens that can be recognized as non-self. These surface antigens can evoke a cellular immune response which can then prevent the spread of the malignant cell by destroying it, much as a cellular immune response can reject a transplant bearing foreign antigens.

Immune surveillance has taken on the garments of a dogma. Much evidence has been gathered, allegedly in support of the hypothesis. While it must be granted that the immune surveillance hypothesis has intuitive appeal and satisfies our basic telologic needs,[†] such evidence as exists is not convincingly in support of the hypothesis. The following major types of evidence are available:

1. Animals or human beings under immune suppression develop tumors more readily than healthy animals or people. While this is certainly true, it is also an uncomfortable fact that most of these tumors involve the immune system. It is not very hard to argue that when one type of defect exists in the immune system, that is, a failure to mount a response, another, that is, the development of tumors, may be the result of the same defect and is correlated with the immune response per se. One may draw an analogy with the fact that patients with pernicious anemia develop demyelination in the central nervous system; however, the latter is unrelated to the anemia per se. It is a result of a common basic pathologic condition, that is, the inability to absorb vitamin B_{12}.

2. Neonatal thymectomized animals become susceptible to tumorigenesis with polyoma virus, an agent that is not tumorigenic in healthy animals. The tumors which develop are quite clearly not analogous with the tumors that develop in healthy mice. Polyoma virus tumors are, therefore, strongly antigenic, as opposed to normal tumors that are only weakly so. If one argues that that is indeed the point behind immune surveillance, that antigenic tumors are rejected while less antigenic ones may creep through, the tumors that develop in immunosuppressed mice, without the artificial superaddition of polyoma virus, are as weakly antigenic as those in normal mice. In other words, removal of immune constraints does not select for the emergence of very antigenic tumors. Furthermore, most patients who are immune suppressed do not, in fact, develop tumors, and those who do tend to develop one rather than a multiplicity of tumors.

Conclusions

There are, as has been indicated in this brief survey of immunology, lacunae in our understanding of the function of the immune system. There are, however, several laboratories actively pursuing many leads into several areas of research.

Two areas of interest in immunology were barely mentioned in this review because of their complexity. They are the problem of the GOD (generation of diversity) and regulation of the immune response.

GOD generates debate as intense as God Himself. Instead of the believers and the agnostics, we have the somatic generation of diversity school and the germ-line school. To extend the analogy further, like most intelligent agnostics and believers, the somatic and germ-line schools are beginning to realize that they do not disagree so profoundly after all. The issue is central to immunology, and the reader is referred to any standard text of immunology.

Regulation of the immune response remains a total mystery. At what point does proliferation of a selected clone cease? From various studies, it has become clear that a B-cell "selected" by an immunogen can undergo from 3 to 50 doublings. The last may seem an impossibly large number. However, work done by Williamson and Askones[8] and others, by serial passage of a single antibody secreting cell live through several recipient animals, has shown that the stimulated lymphocyte can indeed undergo up to 50 mitotic divisions, generating 2^{50} cells, larger than the total number of lymphocytes in any one animal. Recently Jerne[9] has suggested that the regulation is achieved through a "lymphocyte network." The hypothesis is too complex to be dealt with in a review of this size, and one is referred to recent articles by Jerne.[9]

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[*] Apparent exceptions are neonatal animals and the F_1 (first filial generation) hybrids between two highly inbred animals. However, neonatal animals do not possess an intact T-cell function, since this develops later in ontogeny. In case of F_1 hybrids, which accept transplants from either homologous parent, the transplant is genetically identical to one half of the animal's genome, and therefore the immune system cannot detect that it is foreign.

[†] In this sense grafts are clearly aberrations of a very advanced medical technology. Granting this and the unfailing regularity with which they are rejected in healthy animals, the basic teleologic value of graft rejection becomes questionable. Immune surveillance offers a straw of support.

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Membrane Receptors and Genetics of Cells Involved in Immune Response*

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Recent studies of the cell plasma membrane have attempted to elucidate its structure and composition at the molecular level. These investigations have led to concepts of the cell membrane as a dynamic rather than a static structure. Cell-cell interaction is required for both the humoral and cellular immune responses, and the plasma membrane is fundamental in cellular recognition and interaction. In this article, we shall discuss some immunologic aspects of the cell membrane with emphasis on membrane-associated receptors for immunoproteins, and we will consider membrane immunogenetics. Since the immune response is primarily determined by lymphocyte subpopulations and cells of the monocyte-macrophage series, the discussion of receptors will be limited to these cell types.

Immunologic markers and receptors

A substantial body of evidence derived primarily from detailed studies of rodent and avian species has established criteria for the division of lymphocytes into bone marrow-dependent or derived B cells and thymus-dependent or derived T cells (Fig. 1).[1–5] Thus, basic and clinical immunologists have attempted to investigate membrane markers that can allegedly define these cell types. In this review it is our intent to consider plasma membrane components of cells involved in the immune response as they relate to basic cell biology. It is important to point out in considering immunologic receptors that there is a distinction to be made between a plasma membrane determinant, an antigen or an immunoprotein, which is actually present on the membrane and detectable by labeled-antibody methods, and a receptor, a molecular complex on the surface of the lymphocyte or macrophage membrane, which recognizes immunoprotein or antigen. The concept of membrane-associated immunologic receptors and their importance in the establishment of the immune state is not new and predates the era of molecular immunology.

It was postulated about seventy years ago by Ehrlich[6] that the receptors for antigen recognition on immunocompetent cells may be preformed membrane-associated antibodies (Fig. 2). This concept of antigen receptors has been reintroduced, and recent evidence suggests that membrane Ig (immunoglobulin), that is, a whole immunoglobulin molecule or a portion thereof which is an integral part of the plasma membrane, may, in fact, have a major role in the processing of antigen. At the present time a central and controversial area of immunology concerns the origin and characterization of membrane immunoglobulin and its relationship to antigen receptors.

In man and most mammalian species, B lymphocytes are characterized by the presence of readily detectable membrane immunoglobulin. This immunoglobulin can be demonstrated using fluorescein-labeled polyvalent or monovalent antisera

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* Supported by the National Institutes of Health, USPHS grant AI-12478-01 and by grants from the National Leukemia Association, Minnesota Medical Foundation, and University of Minnesota Graduate School.

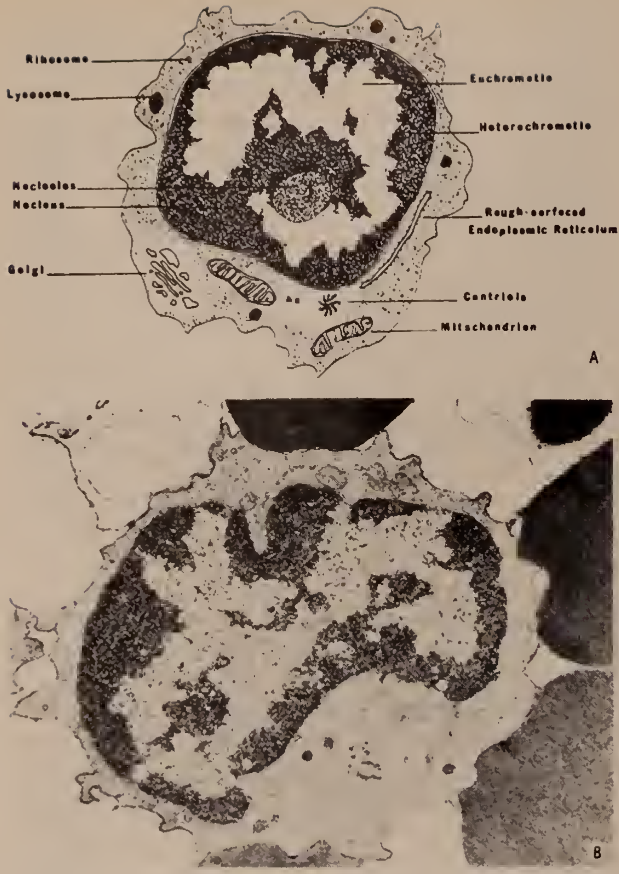

FIGURE 1. Lymphocyte. (A) Diagram showing components. (B) Photomicrograph

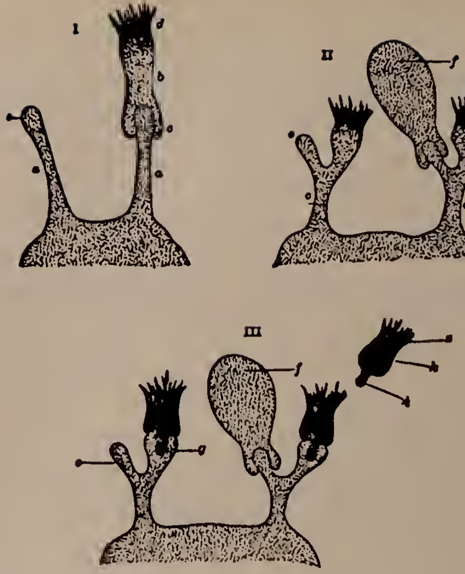

FIGURE 2. Receptor apparatus of red blood cells; various types of receptors according to Ehrlich.*[6]

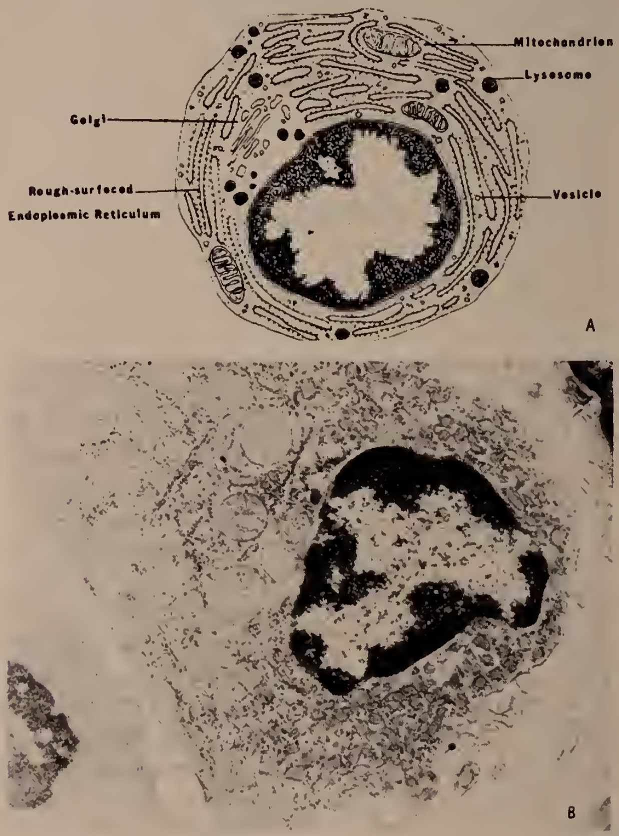

FIGURE 3. Plasma cell. (A) Schematic representation. (B) Photomicrograph.

directed against various immunoglobulin classes. The major immunoglobulin class present on circulating B lymphocytes appears to be IgM. Other immunoglobulins, including IgG, IgA, and IgD may also be present.[2] Although the presence of membrane-associated immunoglobulin on B lymphocytes is well established, its existence on T lymphocytes remains controversial. Technical problems involving membrane fractionation and purification have hampered its biochemical and genetic characterization on both T and B cells. Vitetta and co-workers[7,8] have isolated by immunoprecipitation a membrane-associated immunoglobulin from mouse B lymphocytes that has the electrophoretic and antigenic properties of monomeric IgM. These investigators were unable to detect membrane immunoglobulin on T cells. On the other hand, Marchalonis, Cone, and Atwell,[9] employing similar methodology, have reported the isolation of a membrane surface protein from thoracic duct T lymphocytes which also appears to be monomeric IgM. Whether the membrane-associated immunoglobulin that has been isolated from T and B lymphocytes is IgM, which exists on the membrane surface as a monomer, or represents a new class of immunoglobulin, IgX, with antigenic determinants similar to IgM, is unknown.

In most humoral responses there is an interaction between T and B lymphocytes. After this interaction the B lymphocyte undergoes proliferation and differentiation into a plasmoblast, and subsequently into an antibody-forming plasma cell (Fig. 3). In cell-mediated immunity, the main effector cell is the T lymphocyte. T cells are involved in the elaboration of a number of lymphocyte products, such as

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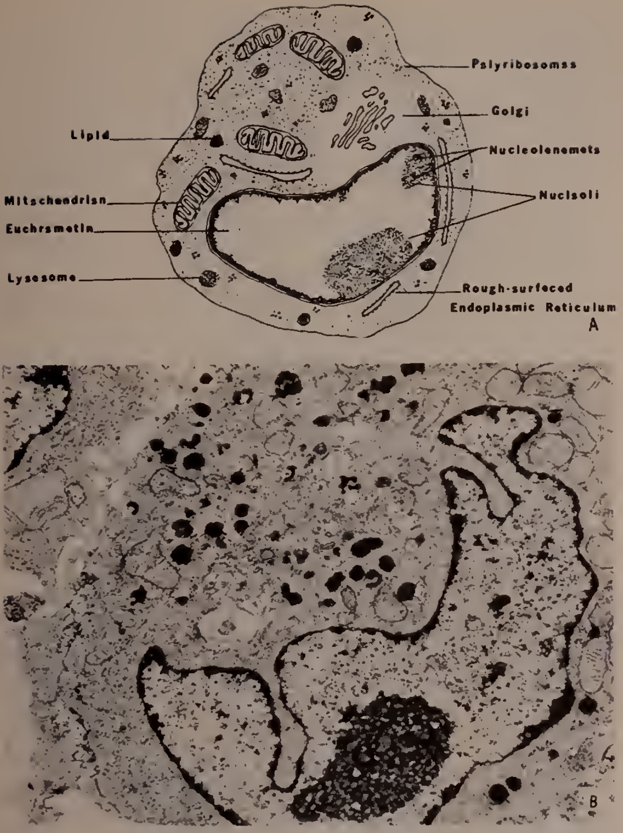


FIGURE 4. Blast cell. (A) Diagram labeling parts. (B) Photomicrograph.

blastogenic factor, migration inhibitory factor, chemotactic factors, and lymphotoxins. The T lymphocyte also has a major functional role in the graft-rejection and cytotoxic reactions.[10–13] Since B and T cells have different functions in immunologic reactions, it would seem likely that they have distinct types of membrane receptors which reflect their physiologic responsibilities. Presumably both cell types must have specific antigen receptors, although these receptors are not necessarily biochemically or structurally similar and may in fact combine with different antigenic determinants. Specific antigen-binding cells have been identified by use of radioactive antigen and autoradiography, or antigen-coated columns. The frequency of cells which have the property of binding specific antigen in any lymphocyte population is about 1 in 10^5 or 10^6 cells, and thus the investigation of specific antigen-binding cells is difficult.

At present T lymphocytes are identified by the presence of specific membrane determinants. Little is known about the function or chemistry of these markers. Rodent T lymphocytes have a number of characteristic plasma membrane antigens; these include the theta antigen and antigens known as TL (thymus-leukemia) antigens and Ly antigens or lymphocyte alloantigens.[5] Human T lymphocytes have the property of forming rosettes with sheep erythrocytes.

By using erythrocytes coated with antibody and complement it has been possible to demonstrate that some B lymphocytes have a receptor for the third component of complement. These lymphocytes have been called complement receptor lymphocytes or CRL.[14] Biologically active C3 receptors from lymphoid cell lines have been solubilized using nitrogen cavitation followed by extraction with 2M. potassium bromide; however, lipid extraction results in loss of activity.[15] As will be mentioned later, the appearance of the C3 receptor is under genetic regulation. Recently, a rosette assay has indicated that human B and not T lymphocytes have a receptor for Epstein-Barr virus.[16] Whether the Epstein-Barr virus receptor is expressed by all or by a subpopulation of B cells is unknown. Most B lymphocytes have a receptor for antigen-antibody complexes or aggregated immunoglobulin. This receptor has specificity for a site on the Fc portion of the immunoglobulin molecule and is known as the Fc receptor (Fig. 2 in Rajan's article, p. 1081). Several properties of this receptor have been investigated. For example, the Fc receptor appears to be a necessary requisite for lymphocyte-mediated antibody-dependent cytotoxicity. Moreover, these receptors have been demonstrated to be altered during functional changes in the plasma membrane, that is, during capping. The biochemistry of the Fc receptor is not known, and although this receptor exhibits class and subclass specificity, it is less restrictive for IgG molecules from other vertebrate species, which in many cases can compete with native IgG for binding sites. B lymphocytes have also been shown in a variety of species, including man, to bind aggregates of IgG.[17] Whether the aggregate receptor is different from the Fc receptor, or both are actually Fc receptors with specificity directed against different domains, is not known. Teleologically, it would seem that maintenance of an Fc receptor with reduced specificity toward ligand would be beneficial for the host.

Although these types of ligand-binding studies have resulted in the development of clinical assays for the quantitation of T- and B-cell populations in peripheral blood,[2] they are not definitive. Cells which have receptor characteristics of both cell types and other cells, null cells, which appear to lack these receptors have been observed.[2] Moreover, B cells lose their characteristic markers and receptors as they undergo differentiation to plasma cells. The development of more sensitive assays for membrane markers on lymphoid cells is essential and will probably result in substantial alterations of present-day dogma.

Lymphoid cells are capable of binding a number of lectins, such as phytohemagglutinin, concanavalin A, and others, through specific receptors. These lectins have the capacity to cause agglutination of lymphocytes and to induce a sequence of events leading to mitosis or blast transformation (Fig. 4).[18,19] T and B cells in man and mouse can be distinguished

TABLE I. Selectivity of lymphocyte mitogens for T and B cells

Phytomitogens (Lectins)	Human		Mouse	
	T	B	T	B
Phytohemagglutinin (PHA)	+	?	+	—
Concanavalin A (Con A)	+	—	+	—
Wax bean	+	—	ns*	ns
Pokeweed (PWM)	+	+	+	+
Insoluble PHA, PWM, Con A	+	+	+	+
Bacterial products				
Salmonella lipopolysaccharide(LPS)	—	—	—	+
Aggregated tuberculin	ns	ns	—	+
Miscellaneous				
Anti-immunoglobulin sera	—	+	—	+
Dextran PVP	ns	ns	—	+
Trypsin	ns	ns	—	+

*ns = not studied.

TABLE II. Surface markers on human and murine lymphocytes

Surface Markers	Human	Mouse
Sheep erythrocyte rosette formation	T	. . .
Brain-associated antigen	T	T
Theta	. . .	T
TL,Ly	. . .	Thymocytes
Immunoglobulin	B	B
Antigen-antibody complexes	B	B
Aggregated Ig (Fc)	B	B
C3	B	B
Antilymphocyte (thymocyte) sera	T	T
Anti-B-cell sera	B	B
Anti-T-cell sera	T	T
Epstein-Barr virus	B	. . .

by their response to different mitogens, as shown in Table I, and it is important to note that the form of mitogen presentation, soluble versus insoluble, can influence T- or B-cell response.

The precise characterization of receptors and determinants on lymphocyte subpopulations remains a major prerequisite for elucidating the complex interaction that occurs with antigen, macrophages, and other cell types. At present, T and B cells are identified by immunoreceptors and markers (Table II). It is essential to note that the classification is empiric and may be dependent on cell cycle, cyclic nucleotides, or other complex intracellular regulatory mechanisms which are not understood.

The monocyte-macrophages are primarily phagocytic cells (Fig. 5). They have membrane receptors which are specific for two of the four major subclasses of human IgG, IgG_1 and IgG_3. The binding site on the immunoglobulin molecule has been localized to a specific domain, CH_3, of the molecule. The monocyte-macrophage, in addition, has an independent C3 receptor system which recognizes the activated form of the third component of complement, $C3_b$. These receptors are of importance in the binding and engulfment of opsonized bacteria and erythrocytes.[20–22] Macrophage Fc and C3 receptors are also important in the mechanism of immune hemolytic anemias. Moreover, mononuclear phagocytes have the capacity to bind antigen and antigen-antibody complexes. Although the macrophage frequently degrades the antigen which binds to its surface, there is considerable evidence that small amounts of antigen bound to the macrophage membrane may be potent in the afferent or induction phase of the immune response.[21] These cells may then interact with B and/or T lymphocytes, leading to an immune response. The ability of the macrophage to interact with B and T lymphocytes is in part determined by certain genetic regulatory mechanisms which will herein be discussed.

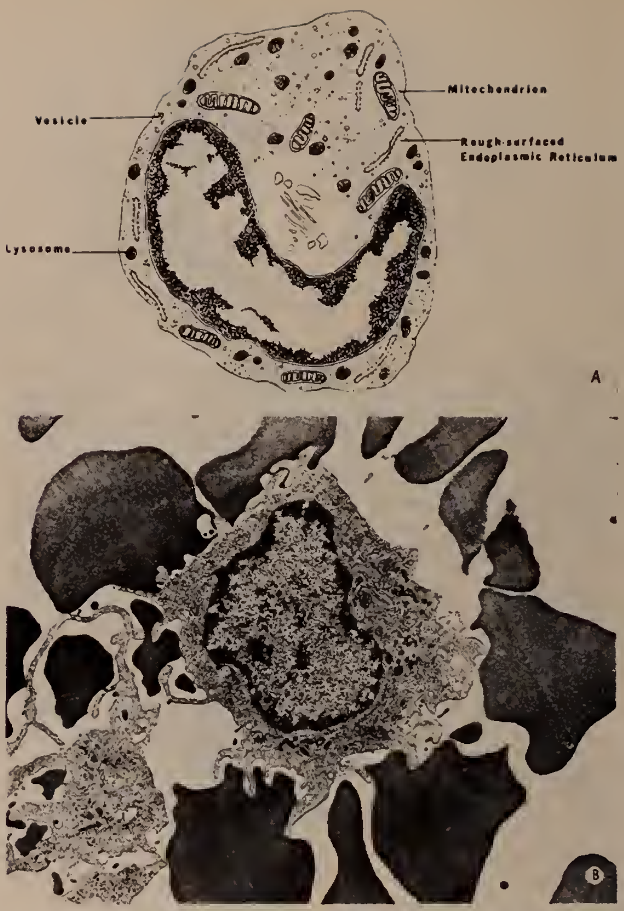


FIGURE 5. Monocyte. (A) Diagrammatic representation. (B) Photomicrograph.

It has thus become apparent that the precise and detailed characterization of the membrane components of cells involved in immunologic phenomena and the events which follow the interaction of antibody or antigen or lymphoid cells or mononuclear phagocytes with various tissue cells is critical to the elucidation of host defense mechanisms.

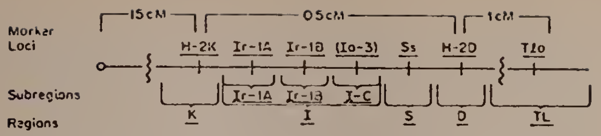
Membrane immunogenetics

There are three basic aspects of membrane immunogenetics which we will consider. The first observation is the existence of a histocompatability locus. This locus has been most extensively studied in man, mice, guinea pigs, and rats.[23-25] Genetic mapping, primarily in mice, has utilized procedures involving recombination analysis. The second concept is that the genetic products within this locus, which is characterized by extensive genetic polymorphism, determine allograft survival or rejection, graft versus host reactions, T-B cell-macrophage interactions, and the ability to elicit an immune response to various synthetic and natural antigens. They also appear to determine the MLR or MLC (mixed leukocyte reaction) and CML (cell-mediated lysis) reaction. The control of serum complement levels C1,4,2, and 3,[26,27] the ontogeny of the appearance of the receptor for C3 on B lymphocyte subpopulations,[28] and resistance to certain murine oncogenic viruses[29] have also been related to this locus. The third aspect will be concerned with the mechanism by which this genetic locus exerts such pleiotropic effects. A logical presumption is that the initial event in all of the already cited biologic phenomena involves a recognition signal at the level of the plasma membrane. The genetic products at this locus would then function as membrane markers, determinants, receptors, and antigens. They would be on the membrane surface and promote cell-cell interaction within immunologic and nonimmunologic cell systems, and transmit to the nucleus the proper signal to convert a resting cell to an immunologically active one.

The genetics and biochemistry of the histocompatibility locus has been most extensively studied in the mouse and will be presented as a model. Despite apparent similarities between the MHC (major histocompatibility locus) in different animals, basic differences exist; one example of this is the map location for the MLC response in the HL-A (human histocompatibility system) as compared to H-2 (the murine histocompatibility system). A discussion of the I region of the H-2 system will be presented, since the responses or nonresponses to various antigens have been mapped to this region. Beta-2-microglobulin, a protein which is not believed to be linked to the H-2 locus and has been recently reported to be on a separate chromosome from HL-A,[30] will then be discussed, since this protein provides important clues for the evolution of the histocompatibility locus and its relation to the immunoglobulin genetic system. Finally, we will attempt to relate the histocompatibility locus to the cell membrane, consider macromolecular complexes present on the membrane, and determine structure-function relationships.

MHC (major histocompatibility locus)

The major histocompatibility locus in mice, located on the IX linkage group or the seventeenth chromosome,[31] has been divided into four major regions: the K, closest to the centromere; the I, which has been subdivided at present into the IA, IB, and IC; the S region; and the D region, which is most distal from the centromere (Fig. 6).[24] The various genes at the H-2 locus form the H-2 haplotype, and these are expressed as superscript letters. Thus, for example, the Balb/c mouse, which has an H-2^d haplotype, has the d allele at the K,I,S, and D loci. An H-2^b mouse, C57BL strain, would have the b haplotype at each of the H-2 regions. Through genetic crosses of these haplotypes, one would predict that some of the progeny would represent recombinants within the H-2 locus.



Genetic fine structure map of the *H-2-Tla* gene complex of mouse chromosome 17, showing marker loci, regions, subregions, and map distances.

FIGURE 6. Genetic map of H-2 locus.*[24]

The earliest studies on the MHC were done by Gorer in 1936,[32] who demonstrated the existence of H-2 antigens by serologic methods. The role these antigens played in graft rejection was realized by Gorer in 1937.[33] Later investigations established that the serologically determined membrane antigens expressed on the membrane surfaces of all cell types studied, excluding germ cells and embryonic tissue, represent the gene products of the K and D region.[34] Genetic incompatibility at these loci determines allograft rejection and cell-mediated lysis.

The frequency of recombination between two loci is inversely related to the map distance between the two markers. Thus, one would predict that the frequency of recombination occurring between the K and I regions would be less than recombinants occurring between the K and D regions. This is observed, and the frequency of recombinants occurring between the K and D regions is about 0.5 per cent. The genetic distance between the K and D regions is determined by convention as 0.5 centimorgans.[24] Therefore, it is possible to derive recombinant strains, maintain the recombinant haplotype by inbreeding, and in this manner genetically dissect the H-2 locus. The genetic position of the K, I, S, and D regions was therefore determined by an analysis of the frequency of recombination. Recombination studies have also been used to determine whether the ability to respond to two different antigens is under unigenic or multigenic control. If the immune response to antigens x and y is under multigenic control, then it should be possible to obtain recombinants which can elicit a response to antigen x or y, but not both. If the response to x and y is due to a single gene, then it would be highly unlikely that a recombinant would be obtained that could elicit a response to one but not to the other antigen. This is owing to genetic map distance and the fact that the frequency of intercistronic recombination is much greater than the frequency of intracistronic recombination. Through basic genetic manipulations, it is possible to study the H-2 locus and derive congenic strains of mice differing at only one genetic region of the MHC. Anti-H-2 antibodies can then be obtained against the entire locus or against certain regions by alloimmunization with the appropriate strains. However, the products between the K and D regions are not always antigenically distinct, and serologic cross-reactivity had impeded their characterization. Thus, the basic genetic features of the MHC include the presence of multiple genes in a single cluster, cross-reactivity that occurs between different gene products, and a system characterized by extensive polymorphism, in which 30 different haplotypes have been identified.

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We shall consider some biochemical and immunologic properties of the K and D gene products. The K and D products can be divided serologically into two classes of specificities. Private specificities represent those antigenic properties of the H-2 antigens that determine their immunologic identity, and these specificities are uniquely determined by the K or D loci of each haplotype. Public specificities are characterized by cross-reactivity between the K and D gene products. These public specificities can be attributed to either the K or D loci or even both, and in some cases these molecules share immunologic similarity with nonidentical haplotypes. Since the H-2 locus exists as autosomal codominant alleles, it is possible to have four H-2 antigens present on the cell surface of a heterozygote, each with a private specificity. The demonstration of independent translational mobility of these molecules within the membrane continuum, using fluorochrome-labeled markers visualized by ultraviolet microscopy, is evidence for their existence on the cell surface as independent species. It is also possible to precipitate individual H-2 antigens from solubilized proteins independent of the other H-2 antigens present.[24,35]

The H-2 antigens have been fractionated from the cell surface by two different methods, the first involving proteolysis by the presumed, membrane-impermeable reagent papain, and the second by solubilization of the membrane using nonionic detergents.[35]

The structure, composition, and molecular weight of the HL-A antigens and the H-2 antigens appear to be very similar. Both are glycoproteins with molecular weights of approximately 90,000 following detergent solubilization. The molecular weight is decreased to 43,000 to 45,000 in the presence of reducing agents. Papain treatment of the membrane yields material which is somewhat smaller than the monomeric form of the detergent-solubilized material. SDS (Sodium Dodecyl Sulfate) gel electrophoretic patterns of papain-solubilized membrane reveal the presence of two species, one with a molecular weight of about 33,000 which retains antigenic specificity and has carbohydrate present, and the other species with a molecular weight between 11,000 and 12,000 and no carbohydrate present.[35] This smaller peptide was initially called the CPF (common portion fragment) as it was identical in HL-A preparations of different haplotypes. It now appears that CPF is beta-2-microglobulin,[36] and it appears that a murine beta-2-microglobulin is resolved on H-2 preparations. Biochemical studies suggest that the antigenic specificity of the transplantation antigens is due to the tertiary structure of the protein and that tyrosine residues play an important role in maintenance of the proper conformation. Regardless of the H-2 haplotype, the carbohydrate consists of the same monosaccharide units, galactose, glucosamine, mannose, fucose, and neuraminic acid serving as the terminal residue. The present model for the carbohydrate is that it exists as 1 to 2 chains on the 33,000 dalton portion of the antigen. Removal of these residues by sequential enzymatic treatment does not result in loss of antigenic activity. Perhaps the carbohydrate side chains are necessary for stabilization of the histocompatibility antigens in the membrane.[35] Further studies are necessary to resolve this point, and the isolation of mutant cells which fail to attach carbohydrate moieties to the histocompatibility antigen would be of interest. Biochemical and immunologic studies of the K and D gene products suggest that the amount of homology between two different alleles at the same loci is the same as that between the two loci for the same allele. To describe this relationship using H-2 nomenclature it can be restated that the homology between K^b-K^d or D^b-D^d is equivalent to the homology shared between K^b-D^b or K^d-D^d. The homology is significant and related to the presence of public specificities. It has been postulated that the K and D gene products evolved by a tandem duplication from a precursor gene occurring late in evolutionary development.

The S region, situated between the K and D regions, controls the expression of the Ss (serum serologic variant) and Slp (sex-linked protein) serum proteins.[23,24] The Ss gene controls the quantitative levels of the Ss protein which is a serum beta-globulin. The Ss^h allele produces as much as a twenty-fold difference in Ss levels as the Ss^l allele. The expression of the Slp protein also appears to be influenced by two alleles. The Slp protein is only expressed in males, but can also be expressed in females or castrated males that are Slp positive by testosterone treatment. Anti-Ss and anti-Slp react with the same molecules in an Slp positive animal, although not all Ss molecules react with anti-Slp. Thus, the genes controlling Ss and Slp are closely linked and not divisible at present, and it appears that several of the Ss molecules in serum have Slp determinants.[23,24] The Ss and Slp loci are probably under similar control mechanisms, and both are serum proteins and have never been demonstrated to appear on membrane surfaces. Very recently,.serum complement levels have been reported to be linked to the Ss allele.[37] The Ss protein has been tentatively identified as the fourth component of complement.[38] Finally, it has also been determined that C3 levels are linked to HL-A haplotypes.[39] The genes determining the immune response to a variety of antigens, the MLR locus, the GVHR (graft versus host reaction), transplantation antigens, and the lymphocyte Ia antigens have been mapped to this region. For the sake of clarity, a discussion of the immune response genes will be presented first, followed by a discussion of membrane antigens coded for by genes within this region.

Antigens which have been used to study the genetic control of the immune response have been of three major types.[40–42] Historically, the investigations employed native antigens such as diphtheria toxoid and insulin. The second group of antigens employed were synthetic antigens which have a limited and characterized number of antigenic specificities. The third group of antigens include the alloantigens, of which theta antigen is an example. That genetic factors will influence an animal's immunologic response toward a foreign antigen has long been recognized. Scheibel in 1943,[43] following immunization of random-bred guinea pigs with diphtheria toxoid, divided the animals into "good" and "poor" responders. Following several generations of inbreeding where good and poor responders were kept distinct and bred separately, he was able to separate these two inbred lines completely into uniformly good and poor responders. Since relatively few generations were required to perform this selection process, Scheibel suggested that the number of genes determining low response to the toxoid that had to be segregated were few in number. The studies of Arquilla and Finn[44] with inbred strains 2 and 13 guinea pigs demonstrated that not only was the response to an antigen under genetic control, but that genetic influences determined the ability to respond to specific antigenic determinants. Using beef insulin as the antigen, they observed that antibodies made by strain 2 animals did not compete with antibodies made by strain 13 animals for binding to insulin. Therefore, the two strains differed in that they had the genetic capability to recognize different antigenic determinants on the same molecule.

The existence of IR (immune response) genes in guinea pigs was suggested by observations that certain random-bred animals developed cellular and humoral response to DNP (dinitrophenol) when coupled to the random polymer PLL (poly L lysine).[45] Other animals, however, did not elicit any immunologic response to DNP-PLL, and genetic crosses suggested that the ability to respond to this hapten DNP-carrier PLL system could be explained by the segregation of two alleles at the same locus. Further investigations by Gasser and Silvers[40] and McDevitt and Benacerraf[41,46] indicated that strain 2 guinea pigs could respond to DNP-PLL or to DNP coupled to a copolymer of GL (glutamic acid and lysine) but not to a copolymer of GT (L-glutamic acid and L-tyrosine). Strain 13 guinea pigs on the other hand were capable of responding to GT but not to DNP-PLL or DNP-GL.

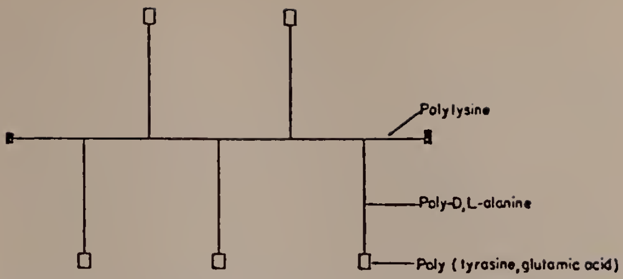


FIGURE 7. Structure of (T,G)-A–L. (Reprinted by permission of the authors and the *Journal of Experimental Medicine*).[48]

That the genetic control of this hapten-carrier system was at the level of the carrier and not the DNP hapten was demonstrated by the ability of responder animals to elicit an antibody response to four different PLL conjugates, while nonresponders failed to elicit an immune response to any of the haptens. It has further been shown that complexing DNP-PLL to MBSA (methylated bovine serum albumin) results in an anti-DNP response in strain 13 animals. These studies suggested that control of the immune response to these hapten-carrier molecules was related to the ability of the animal to recognize the carrier moiety as antigenic. Since strain 2 animals could respond to both PLL and GL carrier molecules, the question arose as to whether the PLL-IR gene also determined response to GL or whether PLL and GL recognition were due to separate genes. It was observed that certain random-bred animals could respond to PLL and not to GL, and therefore the ability to respond to the PLL and GL carriers is under separate genetic control. Following the discovery by McDevitt and Chinitz[47] that the Ir-1 gene of mice, that controlling the response to the synthetic peptide TGAL, as herein described, is closely linked to the H-2 locus, Benacerraf and McDevitt reported that the PLL gene was closely linked to the guinea pigs' histocompatibility locus.[46]

The existence of immune response genes in mice was recognized in the mid-1960s through the work of McDevitt, Sela, and others.[48–50] McDevitt and Sela synthesized the polypeptide antigens (T,G)-A–L, and (H,G)-A–L to study the genetic control of antibody response to these antigens. These antigens and others, such as (Phe,G)-A–L have the same basic structure. A model of the synthetic antigen (T,G)--A–L is seen in Figure 7.[48] It is important to note, however, that these antigens, although simple in structure, are large molecules. The (T,G)-A–L and (H,G)-A–L used in their earlier studies had an average molecular weight of 232,000 and 40,000 respectively. The amount of antibody produced in response to the immunization was in most instances quantitated by employing a modified Farr technique;

TABLE III. Per cent of antigen bound by immune sera

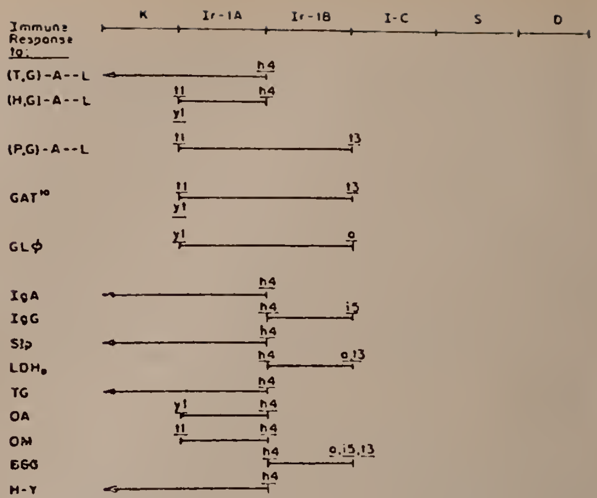
Antigen	DBA-H-2^k (Per Cent)	C57-H-2^b (Per Cent)
(T,G)–A—L	10 to 30	70 to 100%
(H,G)–A—L	10 to 40	0

the antigen is radio-labeled, incubated with the sera from the immunized animal, and the precipitate is counted for radioactivity. Once such a relationship, high versus low, is established, genetic crosses between the two strains will determine whether or not the response is dominant; backcrosses will determine how many genes control the ability to respond to the antigen and whether it is linked to the H-2 locus. Finally, by studying recombinant species the location of this gene within the H-2 locus can be mapped. Employing this type of analysis, the following relationship was observed where the per cent of antigen bound by sera from DBA mice (H-2^k) and C57 (H-2^b) was studied (Table III).[48]

It was thus determined that the immune response to (T,G)-A–L and (H,G)-A–L was under separate genetic control and that this control was linked to the H-2 locus. In both cases response was dominant in heterozygous F_1 progeny. A good response to (T,G)-A–L was correlated to the H-2^b haplotype, for (H,G)-A–L it was associated with the H-2^k haplotype, and to the antigen (Phe,G)-A–L, high responders were observed in the H-$2^{a,b,d,k,q}$ haplotypes, but not in the H-2^s haplotype. The gene controlling response to (T,G)-A–L has been identified as IR-1 and has been mapped to the I region, specifically IA. It must be pointed out, as with (Phe,G)-Pro–Lys), that Ir genes do not have to map within the I region, or even be linked to the H-2 locus. These genes may be sex-linked or located on different chromosomes.[51–54] In addition to the existence of the Ir genes to these synthetic antigens, Ir genes that in many instances can be mapped within the I region have also been reported for native antigens and for alloantigens. We shall discuss certain Ir genes for natural antigens and simply list others (Fig. 8). Our list is in no sense complete, and it is evident that the majority of the Ir genes have yet to be identified.

Immune response genes to natural antigens appear to be as highly specific as the Ir genes demonstrated with the synthetic polypeptides. The DBA mice have been studied for their ability to respond to xenogeneic lysozyme from three avian sources, differing in primary sequences only within residues 99 to 103. The observations from these studies indicate the high degree of specificity that the Ir gene exhibits toward the lysozyme molecule (Table IV).[55]

Lieberman and co-workers[56,57] have demonstrated the existence of IR genes which have been mapped within the IA and IB subregions and determined the response to genetic markers on murine myeloma proteins; response is dominant, and nonresponse is recessive. Recent studies employing DNP conjugated to bovine or porcine insulin as a carrier molecule have demonstrated the presence of an IR gene or genes controlling recognition of insulin which is linked to the H-2 locus.[58] As in the case of lysozyme, this IR gene exhibits great specificity and can recognize subtle differences in the primary structure of insulin molecules from different species. The only difference between the two molecules is in two residues in the A chain at A_8 and A_{10} where threonine and isoleucine in the porcine molecule has been replaced in bovine insulin by alanine and valine. The Balb/c H-2^d strain is a high responder, anti-DNP and anti-insulin when porcine or bovine insulin serves as the carrier moiety. The C57 Bl H-2^b strain is a low responder with porcine insulin as the carrier and a high responder with bovine insulin. The C57 Bl H-2^k strain is a poor responder with either molecule. These studies recall the earlier work of Arquilla and Finn,[44] and it would be important to determine whether the antisera against bovine insulin in the C57 Bl and Balb/c strains were against the same or different antigenic determinants on the insulin molecule.



Genetic mapping of immune responses to various antigens to positions in the *H-2* gene complex. The recombinant haplotypes that define the region(s) to which each *Ir* gene maps are indicated for each antigen. GAT¹⁰, copolymer (L-Glu-L-Ala-L-Tyr).; GLφ, copolymer (L-Glu-L-Lys-L-Phe); Slp, sex-limited protein, LDH_B-lactate dehydrogenase B isozyme; TC, thyroglobulin, OA, ovalbumin, OM ovomucoid, H-Y, male histocompatibility locus.

FIGURE 8. Position of IR genes within H-2 locus.*[24]

TABLE IV. Response of DBA mice to avian lysozyme

Source	Response	Sequence 99	100	101	102	103
Turkey	High	Ala	Ser	Gly	Gly	Asp
Hen	Low	Val	Ser	Asp	Gly	Asp
Japanese quail	High	Ala	Ser	Gly	Val	His

Other IR genes have been reported which are linked to the H-2 locus including the RGV-1 (resistance to Gross leukemia virus).[29] It appears that two unlinked recessive genes are associated with the establishment of a susceptible state to the Gross leukemia virus. Only one of these two genes is linked to the MHC, the other segregates independently of the H-2 complex. In man, IR genes linked to the HL-A locus appear to exist. Two examples mentioned are an IR gene for the ragweed allergen, Ra3, and the streptococcal antigens, SK/SD, and purified nuclease A.[59,60]

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Thus, available evidence suggests the existence of specific IR genes which in many cases has been demonstrated to map within the MHC and has been more precisely mapped in the H-2 system within the I region. The most logical biologic product of IR genes would be a receptor on the membrane surface specific for that antigen. Following receptor-ligand interaction an immune response is elicited. The type of immune response, primary or secondary, which is controlled by these genes, and what cell types, T or B cells or macrophages, express these receptors are unknown. Evidence at present in most systems supports the view that the genetic control of antibody production occurs during the secondary response in the shift from IgM to IgG. The IR genes in some unknown manner regulate only the secondary response in most cases. However, exceptions do exist, one being the genetic control of the IgM response to Type III pneumococcal cell walls.[52] The genetic control of the immune response in many cases is not as simple or well understood as that to PLL and TGAL. In some instances the response to an antigen can be controlled by several loci that are not linked. Response or nonresponse can be determined by one locus, while other loci may determine quantitative levels of immunoglobulin produced. We have mentioned only a few examples of IR genes that are not linked to the MHC. Recently, genes which determine cyclic AMP (adenosine monophosphate) levels following activation of the adenyl cyclase system by hormonal stimulation were shown to be linked to the H-2 locus. High cyclic AMP response is dominant, and it appears that two genes, one to the left and the other to the right of Ss, are involved.[61] Thus, in addition to the presence of non-H-2-linked IR genes, genes mapping within the H-2 complex exist which are not directly related to control of the immune response.

Membrane-associated histocompatibility antigens have been defined into two operational categories: SD (serologically defined) and LD (lymphocyte defined).[62] The SD antigens represent the K and D loci gene products and are present on the surfaces of most cell types. They contribute to allograft rejection and result in the generation of anti-H-2 sera. The LD antigens which are limited to lymphocytes, macrophages, skin, and spermatozoa were detected by the mixed leukocyte reaction, a cellular assay, and have been mapped within the I region of the H-2 complex.[62-64] The LD antigens were discovered by the findings that cells having the same H-2 antigens, K and D, could in certain instances elicit an MLR. The LD antigen nomenclature has been revised from lymph node antigens (Lna) following the demonstration of these antigens on the surfaces of lymph-node cells,[65,66] the lymphocyte activity determinants (lad) detected by MLR,[24] to Ia or immune-associated antigens.[24,67] The Ia antigens are glycoproteins with a molecular weight of approximately 30,000. They are not believed to be associated with K or D gene products at the membrane surface.[66] The Ia antigens are coded for by the IA, IB, and IC regions, and in analogy with the K and D loci, public as well as private antigenic specificities are present. The I region is also characterized by extensive genetic polymorphism with multiple alleles.[55] Also in analogy with the K and D gene products there is great similarity and cross-reactivity between different alleles at the same subregion and between the same allele at the IA, IB, and IC subregions.[55] The presence of Ia antigens on B lymphocytes has been well established; however, the presence, quantitative and qualitative, of Ia on T lymphocytes is controversial.[63,67-69] It appears that the Ia antigens are present on some subpopulations of T cells, all the specificities detected on B cells have been reported on T cells, and the presence or absence of Ia is dependent on cell cycle and the developmental state.[70-72] Antisera to the Ia antigens in mouse inhibits the MLC[24] and blocks the aggregate Fc receptor of B cells,[73] the in vitro response to foreign erythrocytes,[24] and a T-cell supernatant factor.[74,75] Anti Ia in guinea pigs has been observed to inhibit the in vitro proliferative response to antigens and T cell-macrophage interactions.[76,77] Adaptive transfer experiments have demonstrated that histocompatibility is necessary for T-B cell interaction.[77,78] In inbred genetically defined strains of mice it was observed that if compatibility between K, D, and S regions, but not the I region, existed, T-B collaboration did not occur. If, on the other hand, I region compatibility existed without K, D, or S compatibility, T-B collaboration could occur. The genes necessary for T-B interaction, CI (cell interaction) genes, are thus located in the I region of the MHC. The most provocative issue at present related to membrane immunogenetics is the relation between the CI and IR genes with the Ia antigens, all being localized within the I region. The simplest explanation is that the Ia antigens are the membrane products of the IR genes. The Ia antigen could then serve as the T-cell antigen receptor and act in a collaborative fashion with membrane immunoglobulin as part of the antigen receptor on B cells. Thus, a nonresponder to TGAL would lack the IR-1 gene and consequently lack the Ia antigenic determinant that could serve as receptor for TGAL. Evidence that the Ia antigen could serve as part of the antigen receptor for T cells has been obtained with a supernatant factor derived from sensitizing T cells against TGAL.[75] This factor was capable of replacing T-cell function in collaboration with sensitized B cells and lost this biologic property following its adsorption with TGAL, or anti-Ia. The fact that anti-Ia sera inhibits the aggregate Fc receptor on B cells raises questions as to whether Ia antigens are part of the Fc receptor. Another possibility is that Ia is located on the membrane surface in a close relation to the Fc receptor and that inhibition of aggregate binding by

TABLE V. Beta 2 homology with individual domains of IgG

Domain	Per Cent Homology
Ck	26
CH1	22
CH2	22
CH3	28
C lambda	21

anti-Ia is due to steric considerations. The Ia antigens appear to play an important role in both cellular and humoral immunologic responses. The genetic control of IR, CI, and Ia is unknown.

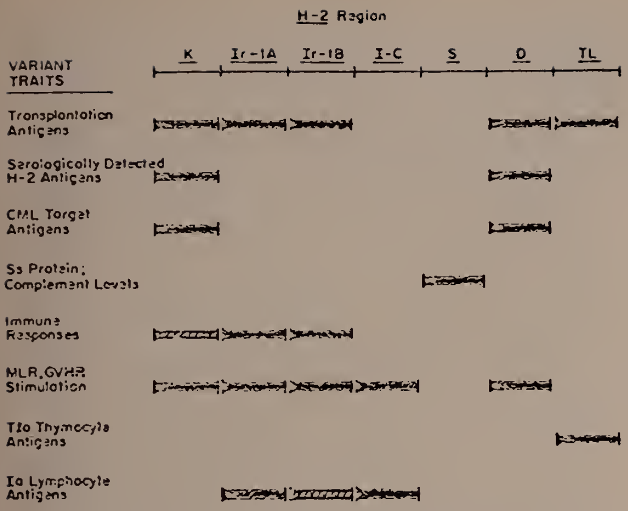
Beta-2-microglobulin is a small molecular-weight protein weighing 11,600 daltons, initially isolated by Berggård and Bearn[79] from the urine of patients with renal tubular failure. This protein may contribute directly to an understanding of the evolution and relationship of the MHC and immunoglobulin genes. Beta-2-microglobulin is 100 amino acid residues in length, contains one intrachain disulfide bond, and exhibits significant homology in primary structure with the constant region immunoglobulin domains of kappa, lambda, and the IgG_1 myeloma protein, Eu.[80,81] Beta-2-microglobulin exhibits the greatest degree of homology with the CH3 domain where 28 of its 100 residues exhibit sequence homology (Table V).[80]

The immunoglobulin domain-like structure of beta-2-microglobulin is also seen in its biologic properties. Beta-2-microglobulin is capable of complement fixation and binding to the Fc receptor in a guinea pig macrophage system, presumably CH2 and CH3 domain functions of immunoglobulin.[82] Beta-2-microglobulin is antigenically distinct and does not react with antisera against any of the major classes of immunoglobulin. In addition to its presence in the urine of patients with renal tubular disease, beta-2-microglobulin is found in the urine, serum, and cerebrospinal fluid of normal individuals in lower amounts. Beta-2-microglobulin has also been detected on the membrane surfaces of lymphoid and nonlymphoid cell lines of both normal and neoplastic origin.[83-86] It appears to be a membrane associated molecule in most cells and in immunoglobulin-producing cells is under a separate genetic regulatory system from immunoglobulin synthesis. Beta-2-microglobulin has also been reported in dogs, chimpanzees, rabbits, mice, and rats and is probably present in all mammalian and perhaps vertebrate species.[87-89] As previously mentioned, capping and biochemical analysis of the HL-A antigens indicate that beta-2-microglobulin is the 12,000 molecular weight common portion fragment of the major transplantation antigens.[36,37,90] Membrane modulation studies of HL-A and B2 by double labeling have revealed that anti-beta-2-microglobulin will cap all the beta-2 and HL-A sites to the extent that these membranes were resistant to complement-mediated lysis in the presence of anti-HL-A or anti-B2.[91,92] Quantitation by iodinated antisera revealed that the lymphocyte membrane contains 1 to 3 times 10^5 molecules of beta-2-microglobulin per cell, and 2 to 3 times 10^4 molecules of HL-A per cell.[93] Thus, beta-2-microglobulin can exist in at least two forms on the human lymphocyte, as part of the HL-A antigens and as a free molecular species. Beta-2-microglobulin also appears to be noncovalently associated with TL[94] and Ia[74] antigens on the cell surface. One must however view these observations with caution based on biochemical fractionation, since the association of B2 with membrane determinants might be an artifact resulting from the isolation procedure employed. Nevertheless, B2 exhibits the greatest degree of homology with the CH3 domain, that portion of the immunoglobulin molecule associated with the membrane surface; a possible central function would be the stabilization of membrane determinants within the membrane continuum. In man it has recently been reported that the MHC complex and the genes coding for beta-2-microglobulin are on two separate chromosomes. The origin of beta-2 is not clear, although it has been postulated that the gene coding for beta-2 arose by duplication of an immunoglobulin precursor gene prior to the duplication event resulting in the various domains.[80] A second theory proposes that the gene coding for beta-2 arose primarily as a result of a large deletion in an IgG-like gene.[95] The similarity in primary structure of beta-2 with the CH3 domain of IgG_1 and its association with HL-A antigens and presumably with K, D, and I region antigens, as well as with the Ss gene product, suggests a common evolutionary primordial gene for the MHC and the immunoglobulin genetic system which diverged late in evolutionary development.

Conclusion

It has become evident that plasma membrane-associated immunologic receptors play a major role in determining the immune response against foreign and self-antigens. We have made a distinction between a membrane determinant and receptor. Both exist on the membrane surface, although a determinant does not appear to bind ligand. The distinction, however, as seen with Ia antigens is often not clear; it is possible that the Ia antigens represent part or all of the T- and B-cell antigen receptors. Although the ligand specificities of certain immunologic receptors have been studied in detail, the biochemistry and the genetic control of these receptors is less well known.

Studies by murine histocompatibility geneticists have contributed to our understanding of the role of the plasma membrane in determining the immune response. The MHC and specifically the H-2 system has been the subject of intensive research, and the clinical relevance, as well as the basic information that has been derived from this system, has been major. The H-2 locus has been subjected to such a



Map of the *H-2–Tla* complex, showing probable locations of genes controlling variant traits associated with the complex. Hatched areas indicate uncertainty about localization to that region. CML, cell-mediated lympholysis; MLR, mixed leukocyte reaction, GVHR, graft-versus-host reaction.

FIGURE 9. Location of genes determining biologic properties associated with H-2 complex.*[24]

degree of genetic analysis that it probably represents the most clearly understood segment of a chromosome from a vertebrate species. We have discussed certain biologic traits which have been attributed to the H-2 region, and their location within the H-2 locus is seen in Figure 9.[24] The amount of potential genetic information present within the H-2 region far exceeds the present number of discrete genes that have been recognized to exist with this locus. Other IR genes will certainly be identified. The I region may be operationally divided into more subregions, and other genetic regions may yet be described with the MHC. Recently the G region mapping to the right of the S and left of the D regions has been described which controls the expression of certain blood-group antigens on mouse erythrocytes.[76]

Qualitative and quantitative alterations in membrane receptors may occur in certain disease states. The per cent of T and B cells, for example, identified by membrane determinants, E rosette and surface immunoglobulin, is altered in chronic lymphocytic leukemia with an increase in the per cent of B cells, those exhibiting surface immunoglobulin. A greater understanding of immunologic alterations in disease states awaits an elucidation of the biochemistry and molecular biology of plasma membrane immunologic receptors and determinants.

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Glossary of terms

1. Adaptive transfer: The active process by which an animal whose own immunologic system has been abrogated receives the sensitized lymphoid cells of a second animal.

2. Afferent immune response: That portion of the immunologic system which is involved in recognition of foreign antigens.

3. Antigenic determinant: A specific site on an antigen which is capable of binding antibody. Usually a single antigen has several discrete antigenic sites.

4. Blastogenic factor: A substance of poorly defined molecular identity which is secreted by "activated" lymphocytes and contributes to blast formation of other lymphoid cells.

5. Capping: Refers to the temperature- and metabolic-dependent process by which a randomly distributed membrane marker may become localized to one region of the membrane following ligand (vide infra) interaction. The phenomenon of capping lends support to the view of the plasma membrane as a fluid dynamic organelle rather than a static one.

6. Carrier: A molecule, usually an immunogenic protein, such as BSA or keyhole limpet hemocyanin, to which a smaller group (hapten) is attached. The function of a carrier molecule is to promote the generation of an immunologic response to the smaller component which in itself would yield only a poor response.

7. Cell mediated lysis (CML): The process in which a lymphoid cell becomes sensitized to a foreign cell and is capable of lysing the foreign cell by cell-cell interaction. CML can occur independent of antibody and complement.

8. Cistron: The length of DNA required for the transcription and translation of a functional polypeptide.

9. Congenic: Most commonly used in murine genetics. Congenic strains of mice are strains that are identical at all regions of the expressed genome except at a specific genetic locus.

10. Dalton: Unit of molecular weight; one dalton equals the mass of one hydrogen atom.

11. Domain: The functional unit of the heavy and light chains of immunoglobulin. Each domain is approximately 110 amino acids in length, is connected by one intrachain disulfide bond. Different effector and biologic properties of immunoglobulin molecules are localized to distinct domains. The heavy chain of IgG for example has three domains within the constant region.

12. Fab: That fragment of the immunoglobulin molecule which following papain proteolysis is still capable of binding antigen.

13. Fc: That portion of the immunoglobulin molecule which following papain proteolysis is easily crystallized from solution and is responsible for the effector function of Ig molecules such as complement fixation and membrane binding.

14. Haplotype: The complete set of genes in an animal contributed by one haploid germ cell during fertilization.

15. Hapten: A small molecule which in itself is poorly immunogenic (Dinitrophenol, DNP) but will become immunogenic and capable of binding antibody after being attached to a carrier molecule (BSA). Therefore, in a DNP-BSA hapten-carrier system, the DNP serves as the hapten while the BSA as the carrier moiety.

16. Lectins: Proteins or glycoproteins derived from plants which are capable of binding to molecules containing a specific oligosaccharide sequence. Lectins have hemagglutinating, leukoagglutinating and mitogenic properties. Mitogenic stimulation, cell-cell agglutination, and capping are possible sequelae following lectin binding to membrane surfaces.

17. Ligand: A molecule capable of binding or interacting with a specific receptor system. Insulin for example would be the specific ligand for the insulin receptor on adipocytes

18. Lymphotoxin: A substance or class of cytotoxic substances secreted by activated lymphoid cells. As with blastogenic factor, the biochemistry of these substances are poorly defined.

19. Mixed leukocyte response: An in vitro assay to determine compatibility between lymphoid cells from two different individuals of the same species.

20. Mitogens: Substances derived from a variety of sources including plants (phytomitogens) and bacterial products (endotoxin) which are capable of triggering blast transformation and mitotic division in "resting" lymphocytes.

21. Nitrogen cavitation: A process capable of fractionating cells through the release of a high pressure nitrogen source into a cell suspension.

22. Pleiotropic: The ability of a specific gene or cistron to have multiple phenotypic expression.

23. Polymorphism: In the genetic sense, the presence of multiple alleles at a specific locus resulting in a variety of genotypes at a specific genetic locus.

24. Primary immune response: The initial immunologic response of an animal following antigen exposure. The primary humoral response is elicited approximately ten to fourteen days following introduction of antigen and is characterized by a 19S IgM antibody response.

25. Primary structure: Refers to the sequence of

amino acids within a polypeptide chain.

26. Secondary immune response: Occurs after subsequent exposure to antigen. In contrast to the primary humoral responses, this response requires a longer time period to elicit and is characterized by an IgM to IgG shift in antibody response.

27. Tandem duplication: In the genetic sense refers to a duplication of a gene. The duplicated gene is adjacent to the original gene.

28. Tertiary structure: The three-dimensional configuration of a protein which will be dependent on environmental factors (pH, ionic strength) and on the primary structure (presence of intrachain disulfide).

29. Xenogenic: Any system in which one of the components is contributed by an animal of a different class than the other animals within the system. A skin graft from a baboon onto a banana would represent a xenogenic graft.

Rebates from independent laboratories

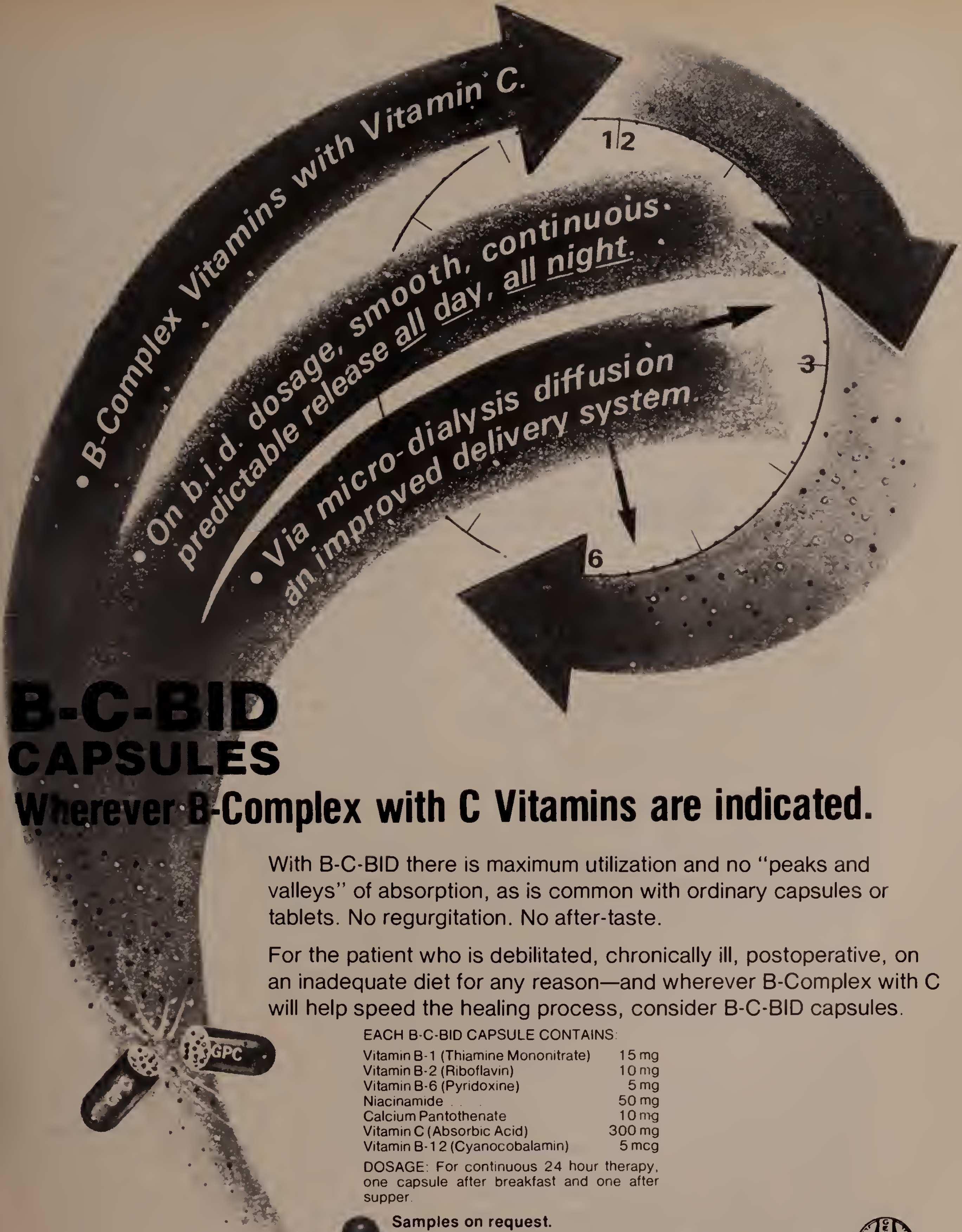
Recent disclosures by the Congress and the Columbia Broadcasting System television network program "Sixty Minutes" have placed emphasis on what we (HEW) believe to be the practices of a small segment of the medical community. We refer to the practice of physicians receiving rebates from independent laboratories. The amount of the rebate is usually determined by the volume of test referrals made to the laboratory. Although only a small number of individuals may be involved in such practices, the criticism tends to be directed toward everyone associated with this area of health care.

It is possible that it is not generally known that this practice is in violation of Medicare law (42 United States Code 1395nn(b)) which provides:

> "Whoever furnishes items or services to an individual for which payment is made or may be made under this subchapter and who solicits, offers, or receives any (1) kickback or bribe in connection with the furnishing of such items or services or the making or receipt of such payment, or (2) rebate of any fee or charge for referring any such individual to another person for the furnishing of such items or services, shall be guilty of a misdemeanor and upon conviction thereof shall be fined not more than $10,000 or imprisoned for not more than one year, or both."

We in Medicare are continually expanding our efforts to prevent and detect fraud or abuse in the program, but our efforts supplement rather than replace the professional responsibility of the medical profession to safeguard the ethics of its members. We believe the State medical societies can, and do, make a real contribution to the prevention of Medicare fraud and abuse. It is with this in mind that we would like to enlist the aid of your society in advising the membership of the illegalities of rebate arrangements, the legal consequences of such practices, and of our full intention to seek prosecution in any cases which come to light.

In addition, we would appreciate your encouraging your constituents (or members) to report offers tendered to engage in the aforementioned practices. The Bureau of Health Insurance Regional Representative for the New York Region—New Jersey, New York, Puerto Rico, Virgin Islands, is: Mr. Joseph Godfrey, 26 Federal Plaza—Room 715, New York, New York 10007; telephone: (212) 264-2503.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Rh Immunoglobulin in Prevention of Hemolytic Disease of Newborn Child*

JOHN G. GORMAN, M.D.
New York City

From the Blood Bank, Columbia-Presbyterian Medical Center

It is a great honor to be asked to give the eighteenth Augustus B. Wadsworth Lecture. This is easily the most important occasion of my career, and I hope you will indulge me if I begin by making some philosophic observations. During the talk, I would like to give you an account of the development of an idea into what we hope will be a practical measure against hemolytic disease of the newborn child. It is a particular pleasure to be invited to speak by a group of public health professionals because I do not consider myself a professional in any field except blood banking. I am an amateur hematologist, an amateur immunologist, an amateur geneticist, an amateur obstetrician, and, tonight, an amateur public health physician. With hemolytic disease it is necessary to cross between all of these disciplines, and the present project has developed very much from communication across disciplines. "How sweet it is," as Jackie Gleason says, to be invited to talk to professionals because at the outset the professionals, the establishment, were very strongly against this idea. Everyone said, "Don't bother with it; it won't work." One of the ways of estimating how good an idea is, is to see how strong the immediate reaction of an expert is when you suggest it to him. If he objects violently, you know that it must have some merit. I don't know whether or not this will hold up in the future.

Beginning

The history of this idea began in Albany because the discovery of the principle on which the whole thing is based was made by a friend and co-worker of Augustus Wadsworth, Theobald Smith, who was an alumnus of Albany Medical College. In 1909 Smith[1] wrote: "Passive antibody mixed with antigen renders the antigen quite inactive as an immunizing agent," the first and still very adequate definition of antibody-induced immunosuppression. His particular system was a diphtheria toxin-antitoxin mixture, and it has since been seen that this phenomenon occurs with other antigens in many animal and human systems.

Let us look at hemolytic disease of the newborn child from the point of view of epidemiology and public health. The reason it has taken so long to apply Smith's phenomenon toward prevention is that everybody's mind was fixed on the mother who is sensitized, has antibodies, and is having babies with hemolytic disease. Everybody was geared to managing and treating such a mother. We should have been thinking of how to define the population at risk and what might be done to the whole population to prevent affected pregnancies from occurring in that population. This is the basic principle behind almost all public health measures.

Now to restate hemolytic disease of the newborn child. An Rh negative mother is married to an Rh positive father. The fetus inherits the Rh factor from the father. The father may be homozygous, in which case every baby will be Rh positive or heterozygous in which case 50 per cent of the babies will be Rh positive. Rh positive red cells of the fetus get into the mother's circulation and stimulate an immune response, the anti-Rh antibody. The fetus that starts the immune response escapes the disease because the antibody formation does not develop in time to harm that fetus. However, in later pregnancies, the antibody crosses back—actually it is pumped back by a placental transport mechanism—into the fetal circulation and coats the fetal red cells if they are Rh positive. They are destroyed in the spleen of the fetus, and all symptoms and signs of hemolytic disease are a direct result of the anemia resulting from this fetal blood destruction.

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* Eighteenth Augustus B. Wadsworth Lecture.

Presented at the fifty-first annual meeting of the New York State Association of Public Health Laboratories, Albany, New York, May 18, 1967.

TO PREVENT THE *20,000 to 40,000 new sensitizations that occur every year in the United States, 400,000 doses of Rh immunoglobulin need to be given. Every time an Rh negative mother delivers a baby, if the baby is Rh positive and ABO compatible, there is a risk situation and Rh immunoglobulin must be injected. If these measures were widely applied, very few new sensitizations to the Rh factor would occur; and once the present crop of sensitized mothers pass the child-bearing period, the disease will drop to a very low level in the community.*

It is very much easier to do something about a disease once the mechanism of pathogenesis is understood, and we have to thank Levine, Katzin, and Burnham[2] for unraveling in 1939 this particular mechanism. One of their patients who had had babies with hemolytic disease had a violent reaction when given a transfusion of the husband's blood. Here were the raw pieces of information which they put together into a very simple hypothesis which they were then able to show was correct. Then it became possible to attack the disease logically. This is the element presently missing from a disease like Hodgkin's disease where, if a clear-cut pathogenetic mechanism were known, hundreds of researchers would zero in on it, basing their work and their experiments on a nice clean theory.

Levine, Katzin, and Burnham's theory made it immediately possible to prevent completely Rh disease. This was by the socially unacceptable eugenic method of having no Rh positive men marry Rh negative women. Thus, theory provided immediately an effective method of prevention. In a way it is a question of how far we are willing to go to prevent a disease. Obviously, what we want is to retain our social status quo, that is, to give the Rh negative woman freedom to marry whomever she wants and also freedom from hemolytic disease. We also need a method which is not too complicated to put into general use because logistics, as I am sure you know better than I, preclude applying a complicated measure in public health.

Now I would like to highlight some features of Rh hemolytic disease. First, only the 7S immunoglobulin G or gamma G antibodies cross the placenta. Gamma M and gamma A antibodies do not. Immunoglobulin G anti-Rh therefore is the antibody that causes the disease. Second, another parameter has recently been studied very extensively, the "original antigenic sin" fetal-maternal hemorrhage. The development of the Kleihauer, Braun, and Betke test in 1957[3] made this possible. This is a test which is simple in theory but difficult in practice. A film of the mother's blood is fixed in alcohol, eluted in acid buffer, stained with hematoxylin, and then counterstained with eosin. Adult red cells are decolorized; because of acid elution of hemoglobin, fetal cells retain their hemoglobin. A count of fetal red cells seen during a five-minute scan is recorded. This test is sensitive enough to detect 0.1 ml. of fetal blood in the entire 5,000 ml. of the mother's circulation.

By studying a large number of mothers (perhaps the best work is by Woodrow and Finn[4] and their group in Liverpool), it was clearly shown that fetal cells are, in fact, transferred from the baby to the mother. They do cross the placenta during pregnancy, tending to be in larger amounts over the last weeks, and at delivery, there is a definite increase in the amount of cells and the number of mothers in whom it happens. This observation makes sense in that the trauma of placental separation and the contractions of delivery might well result in fetal red cells entering the maternal circulation. It is really amazing that they don't get across more often than they do. About 15 per cent of mothers have relatively large numbers of fetal cells detectable by the Kleihauer, Braun, and Betke[3] test.

The third piece of background information very important in this disease is that there are no naturally occurring antibodies to Rh. It is a completely different antigen-antibody system from the ABO system, because an Rh immune response, started by red cell introduction or injection, has to be started from scratch. It has been observed that one injection of Rh positive red cells into an Rh negative individual will trigger the immune mechanism in only a percentage of cases. Those individuals in whom an antigenic stimulus fails to trigger immunity are left without any immunologic memory of that Rh stimulus, and years later the next antigenic stimulus with Rh positive cells will behave just as if it were a very first stimulus. The individuals who become sensitized by the stimulus will make a tremendous response on receiving Rh positive blood again. The titer of one of our Rh negative male volunteers who had been sensitized by one injection of Rh positive blood one year before jumped from a barely detectable level to 4,000 in seven days. This is characteristic of the secondary immune response after a second stimulus. Many other systems are wrongly called primary immune responses in the immunologic literature. For example, injecting sheep red cells into mice does not evoke a true primary response. It is not comparable to the Rh stimulus because a single primary injection of sheep red cells into a group of mice will bring out a response in 100 per cent of individuals. A single injection of Rh positive cells into an Rh negative person may sensitize only 10, 20, or 30 per cent of the individuals, depending on the dose of red cells.

What families are at risk in the community? Fifteen per cent of mothers are Rh negative; 85 per cent of husbands are Rh positive. Multiply them together, and that makes about 12 per cent. Thus, one in eight of all families is at risk. Now of these, eventually only about 12 per cent of the mothers will be sensitized to the Rh factor.

Mechanics of disease

Rh disease has to be set up by two Rh positive pregnancies or by a previous injection of Rh positive blood and then one Rh positive pregnancy. Nevanlinna,[6] from Finland, was really the first to emphasize this two-pregnancy concept, and it has stood up very well. In the initiating pregnancy, fetal cells cross into the maternal circulation during pregnancy, and there is an extra pulse of cells at delivery. Fetal cells may survive up to one hundred twenty days after delivery. The first time that an antibody can be detected is six weeks after delivery of the Rh positive baby. Sometimes the antibody is not detectable until the four-month and even the six-month sample after delivery. This illustrates that the primary response to the Rh antigen has a tremendously long latent time interval, as compared with the rapid within-forty-eight-hour latent period of the secondary response.

In the first affected pregnancy, the mother enters pregnancy already initiated, her immune mechanism having been triggered by a previous antigenic stimulus, pregnancy, or transfusion. The Rh titer will characteristically be low, and if this pregnancy is Rh positive, the titer will rise in the second half of the pregnancy.

An initiating Rh positive pregnancy and the first affected pregnancy are always next to each other, ignoring Rh negative pregnancies which may occur in between. There is no such thing as an initiating pregnancy followed by another Rh positive pregnancy, which is unaffected, and then the first affected pregnancy.

There are various patterns of Rh antibodies that can follow an Rh positive baby. The first occurs when the mother is not initiated, that is, there is no triggering of her immune response. This is the result in 85 or 90 per cent of the mothers who have an Rh positive pregnancy. This lack of stimulating immunity or lack of priming will be proved by the fact that no Rh antibodies appear post partum, and she will go through another Rh positive pregnancy without a rise in antibody titer and for some weeks after the subsequent delivery without the appearance of antibodies. Of course, the next Rh positive pregnancy can perfectly well be an initiating pregnancy, in which case we would see delayed low titer postpartum antibodies at this time. Another very important point is that the initiating pregnancy does not have to be the first pregnancy. It may well be the first, second, third, or fourth Rh positive pregnancy; even the eighth Rh positive pregnancy can be the initiating one, in which case the ninth would be the first affected. With only a 10 to 15 per cent risk of triggering the immune mechanism, a lucky mother can go through several Rh positive pregnancies without being sensitized.

It is exactly analogous to Russian roulette with a one chance in six of shooting your brains out. A lucky person might shoot seven or eight times and still survive.

We have considered the mother who has the stimulus but by chance, more than anything else, does not respond. The second pattern represents the typical case of a mother who was sensitized. We find antibodies at six weeks, we find them again at six months, and then as she goes on the titer may drop a little, but in the second half of the next pregnancy her Rh titer will jump, and an affected baby will be delivered.

The third pattern is where we find antibodies post partum, but after about several more months or a year, they have disappeared and are undetectable. Going into the next pregnancy, however, the Rh titer jumps just as high as in the second pattern and the baby is just as sick, even though the mother entered the pregnancy without detectable antibodies. In the fourth pattern no antibodies at all are detected post partum, yet this mother is sensitized. Her antibody titer will rise in the next pregnancy, and the baby will be just as sick. Such mothers are sensitized without antibody.

A mother who is not sensitized needs fairly large doses of Rh positive cells to get immunity started, whereas once sensitized, she becomes sensitive to extremely small amounts of Rh positive cells, perhaps on the order of 0.001 ml. or even 0.0001 ml.

There are various things that affect the risk to the individual family. You can assure an Rh negative mother who is newly married and intends to have several children that her first baby will be almost certainly unaffected; however, the first baby may trigger an immune response and then the second will be affected if it is Rh positive. The families at highest risk are mothers who are married to an ABO compatible Rh positive homozygous husband, which means every baby will be Rh positive and ABO compatible. If the father is Rh positive heterozygous, the risk actually drops down to one-fourth because to cause the disease there must be two pregnancies, each with a 50 per cent chance of being Rh positive. If the husband is ABO incompatible, the prognosis or the future risk of this family is much less than it would be if he was ABO compatible. It was first observed by Levine[6] in 1943 that ABO incompatible babies are less common than expected in families of sensitized Rh negative mothers. This is because an ABO incompatible Rh positive baby is actually ten times less likely than the compatible to initiate an immune response to Rh. It was Nevanlinna and Vainio[7] who showed that ABO protection, as it is now called, works at the initiating pregnancy but has very little ameliorating effect on first or later affected pregnancies. In other words, an ABO incompatible baby, if the mother has been previously sensitized, is likely to be just as sick or nearly as sick as the ABO compatible baby.

I have probably said too much about the various characteristics and features of the disease, but it is because of these features that the disease has an Achilles heel, which is the fact that the mother is not permanently or irrevocably sensitized at the time the first baby is born. There is still a chance to interrupt sensitization.

Smith's[1] phenomenon, that passive antibody given either with the antigen, sometime before the antigen, or sometime after the antigen, will completely prevent that antigen from starting an immune response, as I have said, has been very widely observed in many systems and in many animals. However, most of the workers who noticed this phenomenon found it was getting in their way; that it hindered rather than helped. They wanted immunity to diphtheria and to poliomyelitis, and when they encountered this phenomenon which prevented good immunity, they sought ways of getting around it. Nobody had thought of utilizing or exploiting the phenomenon for a good purpose. This was the position in 1960. At that time Freda, Gorman, and Pollack,[8] (Dr. Freda is with Columbia and Dr. Pollack with the Ortho Research Foundation) in discussions, came up with the idea of using this phenomenon, which was widely documented in the immunologic literature but little noticed, for Rh negative mothers. At the same time and quite independently from us, in Liverpool, Finn *et al.*,[9] for a different reason, came up with exactly the same plan. They were led to the idea while studying the Kleihauer, Braun, and Betke test. They saw the Rh positive fetal cells in maternal blood films and said, "How can we get rid of them?" Obviously, the only agent which will get rid of Rh positive cells and not harm the mother is anti-Rh antibody. They were not aware, at the time, of the passive antibody protection or immunosuppression phenomenon that Smith[1] had seen; however, they were aware of ABO protection and hoped to mimic this with anti-Rh antibody.[9]

The first step was to obtain Rh antibody in a form that could be injected into an Rh negative individual. We decided from the beginning to use gamma globulin made from plasma that contained Rh antibodies. We selected gamma globulin because it was readily packaged, simply injected, and because it was free from serum hepatitis. Fraction 2 gamma globulin has been used in millions of doses and does not transfer hepatitis. Freda, Gorman, and Pollack[8] prepared the first batch of Rh immunoglobulin in 1961. To do this, they pooled the plasma obtained from plasmapheresis from five highly sensitized Rh negative men and fractionated it into gamma globulin. The original titer of the pool was 1:1,028 by the Coombs method, and this was increased to 1:100,000 in the final gamma globulin. We injected the first vial of this material into an Rh negative volunteer in 1961 and obtained a circulating antibody titer of 1:32 within eight hours. It was still 1:32 in twenty-four hours. The half-life of human immunoglobulin G antibody in the circulation is about twenty-eight days, which is long compared with some animal gamma globulins which have a half-life of from two to four days.

Experiments

Then we began the experiments at Sing Sing prison to establish that this form of passive antibody would actually cause immunosuppression.[8] The first experiment was done with 9 volunteers who were given an intensive Rh antigenic stimulus of five injections of 2 ml. of Rh positive blood at monthly intervals. At the end of a year, 4 out of 5 of those not given the gamma globulin had become actively immunized to the Rh factor, whereas none of 4 men given 5 ml. of Rh immunoglobulin twenty-four hours before the red cells in each occasion became actively immunized. Of course we had to wait until the passive antibody had cleared before we were sure they were not immunized. The second experiment was then done with 27 men who were given two injections of Rh positive cells at six-month intervals. These two injections were a sufficient stimulus to immunize actively 8 out of 13 men, but of 14 given the same two stimuli and given 5 ml. of Rh immunoglobulin three days after the first injection and two days after the second injection, none became immunized. If the statisticians will permit me to add these results, you can see that antigenic stimuli that actively immunized 12 out of 18 volunteers completely failed to immunize any of 18 if Rh immunoglobulin was given along with, or even three days after, the red cells. We now knew that we had an agent which gave very strong, if not complete, immunosuppression despite intense antigenic stimulus with Rh positive cells. Our experience in injecting this in a large number of men over a number of years showed that there were no side-effects whatsoever: no hepatitis and no allergic reactions.

We did further experiments at Sing Sing prison aimed at seeing what dose of Rh immunoglobulin was necessary to obtain immunosuppression. At this point we were running out of volunteers, so the groups were small. To make up for the small groups, we gave very intense antigenic stimulus of six injections of 10 ml. of Rh positive blood at monthly intervals. This is a very intense stimulus, and one would expect it to immunize 8 or 9 out of 10. Four men got six injections of red cells and 1 ml. of Rh immunoglobulin half an hour after each injection of red cells. None became immunized. Of 3 men that got the same stimulus and 0.1 ml. of Rh immunoglobulin, none became immunized. Of the 4 men who got the same stimulus and 0.01 ml. of Rh immunoglobulin, only 1 out of

4 became immunized. There were 3 men who got less than 0.01 ml. One of them got 0.001, 2 of them got 0.0001 ml., and all 3 became immunized. This showed that immunosuppression was effective down to 0.1 ml. and that 0.01 ml. failed but possibly still had some immunosuppressive effect. The 5-ml. dose of Rh immunoglobulin that we had been using previously was therefore in great excess.

Since the many batches of Rh immunoglobulin that have been prepared have varied greatly in strength and titer of antibody, it has become necessary to establish more objective units of antibody. Rather than injecting a certain volume of a particular batch, we should inject a certain number of micrograms of Rh antibody or some other more objective unit. At this point we had effectiveness and safety in Rh negative men, and Dr. Freda, who is the obstetrician of our group, was willing at last to begin using it in Rh negative mothers.

Further studies

Now for some real speculation! How does passive antibody prevent active immunity? One effect is that it clears the antigen out of the body very rapidly. For instance, after Rh immunoglobulin, Rh positive cells that are circulating all disappear from the circulation within forty-eight hours. This is probably not the whole story. There must be also an immunosuppressive effect at a later point in the immune process.

Nossal *et al.*[10] from Melbourne have discovered a very remarkable antigen-trapping mechanism in the lymphoid follicles of lymph nodes and spleen. In lymphoid follicles there are specialized dendritic reticular cells whose processes interweave between the lymphocytes. Antigen is trapped on the surfaces of the cell membrane of these processes jammed up against the cell surface of the lymphocytes. Autoradiographic grain counts over this area of trapping are 200 times background so that there is a tremendous concentration of antigen. Ada and Lang[11] have shown that this trapping mechanism is dependent on circulating antibody and that the unimmunized animal does not trap antigen. As immunity develops, a trapping mechanism is set up.

Now the teleologic function of this mechanism, to my mind, is almost certainly to assure a much more intense and certain stimulation of the lymphoid cells which are going to make the antibody. If antigen passed through the lymph follicles without stopping, there wouldn't be much chance to stimulate immunologically competent cells; however, if it is trapped like this, the resulting high concentration of antigen becomes a very effective antigenic stimulus. I think that the logical place for Rh immunoglobulin or other passive antibody to work is right here. In other words, if the antibody that we are giving is high quality, high binding, and constant antibody, it combines with antigen and prevents it from providing the stimulus which is necessary for the immune response. Möller and Wigzell[12] in Sweden have shown that the passive antibody works by stopping cell multiplication. Immunologists now are very interested in immunosuppression by passive antibody, and some excellent work is being done. I am sure the mechanism of action will soon be unraveled; however, from the public health point of view, fortunately we do not have to wait until that time before we begin using the technic.

I shall now describe the trials of Rh immunoglobulin in mothers which were begun in 1964. To select mothers for the trial who are at risk of being initiated we set up the following criteria. The mother has to be Rh negative and she has to have delivered an Rh positive baby. At the end of pregnancy, the antibody screening test on a postpartum sample must show negative findings. A direct Coombs test on the baby's cells has to show negative findings. In other words, the mother is proved unsensitized up to this point. The baby has to be ABO compatible because an ABO incompatible baby greatly lowers the risk, and much larger numbers of ABO incompatible pregnancies would be needed to get a significant answer. Next we cross-match the Rh immunoglobulin against the mother's cells. The reason for this is that Rh immunoglobulin contains large amounts of extremely powerful Rh antibody, and if it were given inadvertently to an Rh positive individual, it might cause hemolysis. A mother that fits all these criteria is unsensitized and at considerable risk of an immunity being started.[13]

Results

Now let us consider the combined results from the various trials now being conducted: Clarke's[14] trial in Liverpool and Baltimore; the Columbia trial; the Long Beach trial of Jennings and Sullivan[15]; the Cornell trial of Queenan[16]; the trial of John Robertson, M.D.,[17] of Edinburgh, who worked with us at Sing Sing prison and went back to Edinburgh to start a trial; and Schneider and Preisler[18] in Freiburg, West Germany. The first four are using the Rh immunoglobulin produced by W. Pollack, Ph.D.* Liverpool is using an Rh antibody-containing gamma globulin made by the Medical Research Council in England, and the Germans are using a commercially made Rh-containing gamma globulin made in West Germany.

To understand the results, we must look at what happened to mothers who were not treated. There were 108 mothers at Columbia who had an Rh positive ABO compatible baby. All were unsensitized at the postpartum sample, and all were followed carefully with antibody screening tests for at least six months. Fourteen out of 108 developed active immunity post partum revealing that they had become sensitized by the pregnancy and that it had been an initiating pregnancy. Of 150 mothers who undertook the same risk but were given either 5 ml. or 1 ml. of Rh immunoglobulin within three days of delivery, none developed active antibodies.

This shows that the Rh immunoglobulin will prevent development of the antibodies normally occurring after delivery of an Rh positive baby; however, remember that mothers can be sensitized without the development of detectable antibody, so that a second or subsequent Rh positive pregnancy is needed to provide critical biologic proof of nonsensitization. If a mother is still unsensitized after she delivers another Rh positive baby, we consider this proof that the previous baby did not trigger her immune mechanism.

Of 14 mothers from the Columbia control group who have delivered a subsequent Rh positive baby, 4 out of 14 were sensitized to the Rh factor at the time of delivery. Of 16 mothers who have so far delivered another Rh positive baby but were treated at their previous risk pregnancy, none have become immunized. Adding the worldwide figures together, we see that 42 subsequent Rh positive deliveries have occurred in the treated group and no mothers are sensitized, whereas of the 37 subsequent Rh positive babies born to mothers who were not treated at their previous pregnancy, 10 of the mothers are sensitized to the Rh factor. At the six-month point, of 492 control mothers, 62 became sensitized in the postpartum period, and of 539 mothers who undertook the same risk but were given Rh immunoglobulin or other anti-Rh gamma globulin, none became sensitized. Passive antibody will definitely prevent the development of normally occurring postpartum antibodies. Subsequent delivery figures are now, I think, getting to the point of statistical significance, where I, for one, am convinced that we are getting a very strong immunosuppressive effect in the treated group.[19]

Conclusion

To sum up, we can look at the implication of these results in two ways. Let us consider first the population at large. There are 4 million deliveries in the United States, roughly 400,000 risk pregnancies in which the mother might get sensitized. To prevent the 20,000 to 40,000 new sensitizations that occur every year, 400,000 doses of Rh immunoglobulin need to be given. Every mother is now tested for the Rh factor. Every time an Rh negative mother delivers a baby, it is necessary to collect the cord blood and perform ABO and Rh typing. If the baby is Rh positive and ABO compatible, there is a risk situation and Rh immunoglobulin must be injected. The crossmatch must be done. Blood samples must be sent to the blood bank. The blood bank has to test them, and the results have to be conveyed to the obstetrician. He has to make the decision as to whether or not this is a case to be injected, and then he has to inject the Rh immunoglobulin. This is much more of a logistic effort than one might think. But if these measures were widely applied, I believe that very, very few new sensitizations to the Rh factor would occur, and that once the present crop of sensitized Rh negative mothers pass the childbearing period, the disease will drop to a very low level in the community. Many things need to be done before this time comes, but based on the figures from the trials, there is every reason to expect that it will be a reality in a few years.

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For the individual family at risk where there have not yet been any children but where there is concern because the mother is Rh negative, it means that, provided the mother, after the delivery of each Rh positive baby, is given Rh immunoglobulin, her risk will be very close to zero. She can have as many babies as she wants, with little danger of hemolytic disease.

Rh immunoglobulin is now being produced in many countries including the United States. The Ortho Pharmaceutical Corporation has an application with the National Institutes of Health, and approval is hoped for within a year. To conclude, the best advice I can give right now is that an Rh negative woman at risk should not become pregnant until Rh immunoglobulin is available.

Addendum

In the Columbia trial of Rh immunoglobulin, as of January 25, 1968, the number admitted to the trial were 273 treated and 144 controls. The fraction sensitized at six months after the initial Rh positive delivery were 0 in 227 of those treated and 15 in 128 controls.

The fraction sensitized at the subsequent Rh positive delivery were 0 in 33 of those treated and 4 in 16 controls.

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Sexually Transmitted Diseases in the 1980s

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Epidemiologic trends of selected sexually transmitted diseases (STDs) are examined in relation to public health. Syphilis is not a disease of antiquity, but is currently a significant health problem in the gay community. Anorectal herpes, enteric protozoal disease, and Kaposi's sarcoma, major health concerns targeting homosexual males, are discussed. The role of the asymptomatic carrier makes STDs a particular health concern to women. Untreated gonococcal and chlamydial infections may lead to the serious complications of pelvic inflammatory disease (PID). To avert this, emphasis must be placed on locating and treating asymptomatic infected males involved in the transmission of PID. The relationship between genital herpes and women's health is also discussed. Although some conditions are distinguished as "minor STDs," solely because they are not mandatorily reportable to public health authorities, these diseases have major impact on the well-being of infected patients.

Despite advancement in prophylaxis, diagnosis, and treatment, sexually transmitted diseases (STDs) are the most prevalent group of infectious diseases in the United States today. In the 1980s the focus is no longer solely on the "big five" reportable diseases (syphilis, gonorrhea, chancroid, donovanosis, and lymphogranuloma venereum), but has shifted to encompass the so-called "minor" STDs, especially genital herpes and nongonococcal urethritis. This article will discuss a select group of STDs and their impact on public health.

Syphilis

Interpretation of statistical trends must be cautiously approached. The numbers of syphilis cases are subject not only to actual prevalence and incidence of the disease, but also to several other factors, including reporting completeness and case-finding efforts. With respect to primary and secondary syphilis, increased rates have been noticed for several time periods. Nationwide, in 1956, 6,392 cases of infectious syphilis were reported, compared with 23,338 cases in 1965. From 1966 to 1970, the number of cases reported yearly was roughly 20,000. An increase from 19,019 to 25,561 cases occurred in the 1968 to 1975 time frame, representing a 34.4% rise. A steady rise also was noted from 1977 to 1980, with case numbers increasing from 20,399 to 27,204.[1]

The City of New York Department of Health Bureau of Venereal Disease Control's experience reflects similar trends. The increasing rate of primary and secondary syphilis is particularly striking in homosexual males, as demonstrated by the disproportionate rise in the male:female ratio of primary and secondary syphilis. In fiscal 1978, 54.7% of early syphilis male patients in New York City interviewed named same sex contacts, as compared with 38.5% nationally. Syphilis, therefore, is a most significant public health problem in the gay community.

Patients with infectious syphilis should be interviewed for the purpose of locating, testing, and treating all their sexual contacts who may have acquired the infection. Preventive treatment for those who have not yet manifested the disease is of great value, since without it an estimated 20% to 30% of all contacts exposed within 30 days to infectious syphilis will develop infectious disease.[2]

Often, patients will attempt self-prophylactic treatment with antibiotics obtained for other medical complaints. Generally patients treat themselves with suboptimal dosages, masking early signs of infection but not curing the disease. With this in mind, serologic tests for syphilis should be routinely performed in sexually active high-risk individuals.

Gonorrhea

Gonococcal infections pose a major public health threat due to the short incubation time of the disease and its frequently asymptomatic nature. In the United States there has been an increasing incidence of gonorrhea since 1957. Since 1975 the number of reported cases of gonorrhea has stabilized at approximately 1,000,000 cases per year.[1]

Asymptomatic genital gonococcal infections occur in many males, although most frequently such infections are encountered in females. In one study, 2,322 female contacts were obtained from 1,556 male patients, and of the locatable 80.4%, 56% had gonorrhea.[3] Of 833 located male contacts of 799 female patients, 23.8% had symptomatic infections, while 9.8% were asymptomatic. Thus, a high proportion of asymptomatic men are located as contacts to symptomatic women by way of contact tracing.

With prompt, adequate treatment, confirmed by negative test-of-cure cultures, gonococcal infections can be easily cured. Delay in treatment increases the probability of sequelae. Although males generally recognize the discharge and dysuria symptomatic of acute gonorrhea, delay in treatment has been known to produce local complications. Acute prostatitis, vesiculitis, and epididymitis are serious complications of gonococcal infections in males.

In females, gonococcal infections of the genital tract are easily overlooked. Cervicitis is the most frequent symptom of gonorrhea in women, but the discharge produced may be scanty and indistinguishable from normal vaginal discharge. On speculum examination, however, the cervix will appear congested and swollen, with a white or yellow purulent discharge at the os. The asymptomatic women are at increased risk of developing adnexal symptom involvement before a diagnosis of gonococcal infection is made.

The spread of gonorrhea from the endocervix to the endometrium, fallopian tubes, ovarian surface, and pelvic peritoneum is the most serious complication of gonorrhea, affecting about 17% of untreated infected females.[4] In light of the number of cases of gonorrhea in the United States yearly, up to 274,000 women develop gonococcal pelvic inflammatory disease (PID) annually.[5]

Recurrence of PID is a usual process, and the rate at which gonococci are recoverable from the cervix decreases substantially between the initial occurrence of PID and subsequent attacks.[6] It is thought that the gonococci may be responsible for initiating the infection, whereupon normal vaginal flora and other organisms secondarily invade the upper genital tract. Gonococcal infection, therefore, is a predisposing factor to increased risk of nongonococcal PID. Use of an intrauterine contraceptive device and menstruation are additional risk factors increasing the probablility of PID.

Classic symptoms of acute PID include dyspareunia, pain in the lower abdominal region, muscular rigidity, tenderness, abdominal distention, fever, chills, malaise, anorexia, nausea, and occasional vomiting. The unilateral or bilateral abdominal pain is of variable severity and duration. Some patients will find the sensation similar to menstrual cramps and thus discount it. Other patients may be so incapacitated by cramps that they require a visit to a hospital emergency room. Patients with mild symptoms often go to physicians' offices, venereal disease or gynecologic clinics, particularly if they experience vaginal discharge or dysuria.

The diagnosis of PID is based on a bimanual pelvic examination and laboratory tests. Patients usually have bilateral lower abdominal pain, and perhaps a yellowish endocervical discharge on speculum examination. The bimanual examination will reveal unilateral or bilateral adnexal tenderness. Cervical motion tenderness is usually present, although nonspecific. The adnexal masses should be carefully examined to document possible pelvic abscess formation. The uterus is often tender, but of normal size. Patients will have a temperature elevated above 99°F.

Basing the diagnosis of PID on rigid criteria such as leukocytosis, elevated erythrocyte sedimentation rate, and adnexal mass will discount a number of patients with PID, who will be subsequently misdiagnosed and inappropriately treated. This would serve to increase the long-term complications of PID-chronic pelvic pain and ectopic pregnancy.

PID prevention must be viewed as the major goal of a gonorrhea control program.[7] By contact-tracing the PID patient, a male with asymptomatic gonorrhea is frequently uncovered.[8] Without treatment he would go on to reinfect his female partner, and probably numerous others. It is obvious that the patient with PID must remain a high priority for epidemiologic investigation.

Another high priority for epidemiologic investigation is penicillinase-producing *Neisseria gonorrhoeae* (PPNG). Most cases of PPNG are detected in patients who have failed penicillin therapy given for uncomplicated gonococcal infections,[9] providing test-of-cure cultures for penicillinase are made. Although current Centers for Disease Control guidelines indicate screening only positive post-treatment cultures,[10] the City of New York Department of Health's Bureau of Laboratories began PPNG surveillance on all positive cultures in September 1976.[11] From then until August 1980, our monitoring procedure detected 34 confirmed cases in New York City. These cases appeared sporadically, and were not epidemiologically linked to other known cases within the area. Contact tracing determined that spread was limited to two cases of PPNG and two cases of gonorrhea. Local sources of infection could not be identified and it was presumed that the sources of these PPNG infections resided abroad.

Unfortunately, this low incidence of PPNG in New York City is a thing of the past. There have been over 600 reported cases of PPNG in New York City since January 1, 1981.[12] Knowing that aggressive epidemiology is the most effective way to curb the spread of PPNG, the Bureau of Venereal Disease Control has established a special PPNG task force to investigate solely PPNG cases. The task force has been successful in bringing infected individuals to treatment and getting their uninfected sex partners epidemiologically treated with spectinomycin.

Nongonococcal urethritis

Nongonococcal urethritis (NGU) is probably the most common STD in the United States. Although there are no national statistics compiled, the 1977 estimate was at least 2.5 million cases.[13] In England, where the reporting system is more complete, nongonococcal urethritis is nearly twice as common as gonorrhea.[14] Available information indicates that in the United States urban areas NGU is at least as common as gonococcal urethritis.[15] In New York City, the incidence of NGU has been increasing steadily, with the number of cases seen in City social hygiene clinics tripling since 1974.

Chlamydia trachomatis is one of the many agents that causes NGU and has been isolated in 30% to 50% of patients with the infection.[16] Studies indicate that *C trachomatis* is not a commensal of the male urethra, since the organism is rarely found in men not having urethritis.[17] Furthermore, 25% to 30% of men with gonorrhea have concommitant chlamydial infections, and after treatment with penicillin or spectinomycin they will develop postgonococcal urethritis.[18] There is strong evidence that at least half of these cases are due to simultaneous acquisition of chlamydial and gonococcal infections.[17] The sexual transmission of *C trachomatis* cannot be disputed, especially in view of the fact that over 60% of female contacts with men having positive chlamydial cultures harbor the organism.[17,19] The diagnosis of NGU in men attending the New York City social hygiene clinics is currently based on the presence of urethral discharge containing a significant number of polymorphonuclear leukocytes along with the absence of any identifiable pathogens. This approach is not possible in women. Polymorphonuclear leukocytes are commonly present in the lower genital tract of women, and their number varies according to the stage of the menstrual cycle.[20] Although clinical signs of vaginitis, urethritis, cervicitis, and cervical erosion can be related to *C trachomatis* infection,[21] the clinical picture is not particularly helpful in diagnosing genital chlamydial infection. It is well known that patients harboring *C trachomatis* are often asymptomatic.[22] In one study, 76.6% of female patients from whom *C trachomatis* was isolated were asymptomatic.[21] It is evident that the treatment of women with chlamydial infections will be difficult without identification of the organism.

The untreated pool of asymptomatic women infected with *C trachomatis* supports the continuing epidemic of NGU. It has been noted that some women may harbor *C trachomatis* for 16 to 17 months between initial and final cultures even in the absence of intercourse.[23] Factors responsible for these silent infections becoming symptomatic are not entirely known.

Apart from the public health significance of genital chlamydial infection, serious consequences occur in the individuals themselves. *C trachomatis* infection is responsible for acute epididymitis in men under 35 years of age.[24] In women, 26% of salpingitis-PID cases are attributable to *C trachomatis* infections. Since we are aware that cervical chlamydial infection can spread to the fallopian tubes, and that the late sequeleae of salpingitis include involuntary infertility, increased frequency of ectopic pregnancy, and chronic abdominal pain, we must not continue to regard chlamydial infections as a minor sexually transmitted disease.

The presence of chlamydial cervicitis in the pregnant female poses additional problems. *C trachomatis* has been associated with premature labor, and, after delivery, increased risk of postpartum endometritis and salpingitis in the mother. Transmission of the infection to the neonate may occur, causing inclusion conjunctivitis, otitis media, and nasopharyngeal distress.[25] Such infants could develop chlamydial pneumonia characterized by an afebrile course, chronic diffuse lung involvement, tachypnea, distinctive cough, and elevated IgG and IgM levels.[26] Maternal *C trachomatis* infection has been implicated as a possible cause of fetal wastage and neonatal death,[16] making it all the more regrettable that chlamydial culture is not routinely performed to effect proper diagnosis and treatment of this most common STD.

Genital herpes

Herpesvirus infections have been the source of much media interest in the last decade, and in the coming decade will continue to focus public attention toward STDs as a public health issue. Primarily sexually transmitted, genital herpes is most prevalent in the 15- to 30-year age group, the segment of the population that is generally most sexually active.

Genital herpes is typically a recurrent disease, with recurrences tending to be less painful and of shorter duration than the primary infection.[27,28] In women the cervix is usually the site of primary infection; however, cervical involvement is often subclinical. Painful ulcers of the vulva and vagina are frequently associated with adenopathy and constitutional symptoms.

In men, multiple or grouped vesicles can occur anywhere on the glans, the prepuce, or the shaft of the penis. Intraurethral infections have been known to occur, the symptoms of which are easily mistaken for nongonococcal urethritis. Herpetic cystitis has also been described.

Anorectal herpes is more common than realized, particularly in adults with a history of anal intercourse.[29] Inguinal adenopathy often occurs with anal vesicles and ulcers spreading to the natal cleft.

Topical agents, such as acetone, are routinely used to effect drying of lesions. Treatment of the acute attack is not the same as eradicating the infection and eliminating recurrences. No form of therapy has been shown unequivocally to arrest the course of genital herpes, but acyclovir (Zovirax), used topically, will reduce both the duration and the period of viral shedding in primary cutaneous or genital herpes; it does not prevent recurrences.

This fact becomes all the more significant in light of severe consequences occurring to neonates vaginally delivered from infected mothers,[30] as well as the possible association of genital herpesvirus infection and cervical cancer.[31] The lack of effective treatment has great epidemiologic significance in that a small number of asymptomatic infected individuals occasionally shed herpesvirus in their genital secretions. It is estimated that occasional viral shedding occurs in 9.5% of patients with a history of genital herpes, especially female patients with cervical herpes.[28,32]

Enteric protozoal disease

During the past five years, the Bureau of Venereal Disease Control has focused attention on the dramatic increase in the incidence of amebiasis and giardiasis in New York City,[33–36] particularly in the homosexual population. Transmitted by way of the fecal-oral route, anilingus is the sexual practice contributing greatest to transmission, although fellatio can also transfer fecal material to the mouth. The type of sexual activity, rather than sexual orientation alone, is of epidemiologic significance in the transmission of the disease.

The range and often transient nature of symptoms increase the difficulty of diagnosis. The patient with amebiasis may experience mild to severe diarrhea containing blood and mucus, abdominal cramps, flatulence, fever, chills, dyspepsia, and abdominal tenderness. Giardial infections are similar, but stools are greasy rather than bloody, and there is accompanying epigastric pain and weight loss. Before undertaking an expensive work-up to rule out bacillary dysentery, salmonella infection, viral gastroenteritis, peptic ulcer, hiatal hernia, celiac disease, appendicitis, and idiopathic ulcerative colitis, the physician should consider enteric protozoal disease. Sexually acquired enteric disease should always be considered in symptomatic sexually active adults without recent travel histories. Laboratory confirmation is required to positively diagnose enteric protozoal infections, and the skills of an expert parasitologist must be employed.

Correct diagnosis and treatment are essential in enteric protozoal infections; otherwise serious complications may ensue. Giardial infections can give rise to a malabsorption syndrome.[37] Secondary to bowel infection, *Entamoeba histolytica* may disseminate to other organs and initiate abscess formation; this occurs principally in the liver and lung. Additionally, misdiagnosis of amebiasis leading to inappropriate treatment can be patently harmful. Treatment with local and systemic corticosteroids in the belief that symptoms are the result of idiopathic ulcerative colitis will severely exacerbate a previously mild protozoal enteritis or activate a latent infection.[33]

Kaposi's sarcoma

Kaposi's sarcoma (KS) is a rare multicentric neoplasm, the etiology of which is not known. Recently, it has occurred in young to middle-aged homosexual, sexually active men, ranging in age between 26 and 51, with a mean age of 39. These cases, 20% of which were fatal, were concentrated in several large municipalities, particularly New York City, Los Angeles, and San Francisco.[38,39] Traditionally, KS in the United States shows a sex bias with male:female ratio of 10–15:1 and and involvement primarily in older men.[40] The annual incidence of the diseases in the United States has been estimated to range from 0.02 to 0.06 per 100,000 population.[39] In elderly individuals the disease appears as bluish- or purple-colored macules or papules, which slowly progress to plaques or elevated nodules, usually on the lower extremities and occasionally on the upper extremities or other sites. Late manifestations of the disease may include lymph node and visceral involvement; it is rarely fatal. In contrast, KS in some of the homosexual patients has been diagnosed by lymph-node biopsy after having lymphadenopathy and systemic symptoms, including fever, weight loss, and malaise. Other patients had mucous membrane (buccal cavity) and visceral (usually gastrointestinal) involvement. Bluish or purple papules and nodules were primarily located on the neck, arms, and trunk following skin lines. In addition, skin lesions with a pityriasis rosea-like pattern have been described.[41] Severe opportunistic infections such as *Pneumocystis carinii* pneumonia, cytomegalovirus, cryptococcal meningitis, necrotizing toxoplasmosis, candidiasis, and severe recurrent herpes simplex developed in several of these KS patients. *P carinii* pneumonia has also been reported to have occurred in homosexual males independent of KS. The diagnosis of KS is confirmed by histopathologic examination of biopsies of skin lesions, lymph nodes, or tumors in visceral organs.

It appears that this disease usually occurs among individuals with defective immunity. KS patients showed a markedly diminished response to phytohemagglutinin (PHA) lymphocyte transformation studies when compared with normal controls. In several homosexual KS patients, specific defects in T cell lymphocytes were also evident. In one medical center (New York University), 83% of the KS patients have been shown to have a common HLA phenotype—DR5—where normally it is found in 12% of the population.

It is not clear what is causing the sudden incidence in the homosexual population. An association with cytomegalovirus has been suggested, but no causal relationship has been established. Nearly all KS patients had histories of a multiplicity of STDs. Many were sexually active with multiple sex partners and were using a variety of inhalant drugs (amyl or butyl nitrite, etc.). Whether the life style of the homosexual patient or environmental factors peculiar to male homosexuals contributes to an increased incidence of immunologically suppressed individuals is not known.

Comment

The enormous public health problem of sexually transmitted diseases (STDs) will not spontaneously abate. In the 1980s, control activities must be pursued with increased vigilance. Private physicians can aid the epidemiologic process by informing public health authorities of the cases of reportable STD seen in their practices. Whenever possible, sexual contacts of infected patients should also be examined and treated if infected. Preventive treatment is advocated for recent contacts to syphilis, gonorrhea, and nongonococcal urethritis (NGU). When any sexually transmitted disease is detected in a patient, a thorough search to uncover additional STDs is warranted.

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The Challenge of Venous Extension in Malignant Renal Neoplasms

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Virtually all malignant renal neoplasms (MRNs), regardless of cell type, display a strong proclivity for invading regional veins. Such venous extension (VE) ordinarily is confined to the ipsilateral renal vein, but sometimes the tumor thrombus (TT) crosses into the inferior vena cava (IVC), and thence may ascend as far as the heart. Evidence has accrued demonstrating that the presence of VE, while indicating advanced disease, need not imply incurability. On the contrary, isolated accounts of the removal of VE have reported improved salvage by eradication of macroscopic cancer. This has encouraged surgeons to become more aggressive in their approach to certain MRNs, which heretofore were thought to be unresectable because of vascular invasion.

Pathology

Incidence rates. VE occurs in 8% to 67% of patients with MRN.[1–9] Generally, the prevalence rates of VE mirror those of MRN as expressed in a fourfold predominance of both VE and MRN in males over females. MRNs with companion VE occur at all ages but are most common during the fifth decade.

Cell types. VE has the highest association with renal cell cancer, less with nephroblastoma, and least with carcinoma of the renal pelvis, suggesting cell type per se is not principally responsible for vascular involvement.[10–12] Nor is the cytologic grade of the causative neoplasm directly related to the incidence of VE, since TT is generated by both anaplastic and more differentiated tumors, although much more frequently with the former.[5,6,8]

Modes of VE. Invasion of regional veins by MRN may occur externally by penetration across vascular tunics or internally by intralumenal propagation.[13] Generally, veins are externally penetrated by large MRNs that have broken through the renal capsule. Transmural growth into the IVC is more apt to occur on the right side because of the close proximity of the cava to the kidney, whereas on the left side the invasion route is barred by interposed viscera (Fig 1).

Cancerous tissue that breaches the vein usually remains fused to the wall as it grows inward. Then the TT separates from the wall, except in the immediate vicinity of the renal root, and thereafter floats freely. Sometimes, addition of clotted blood around the tumor core may increase the size of the TT to a diameter equal to or greater than that of the IVC, with consequent restricted movement.

VE by the primary internal mechanism results from propagation of tumor initially into the origin of the renal vein. The ingrowth in the majority of cases stays in the ipsilateral renal vein, or it may be impelled variously to different heights in the IVC.

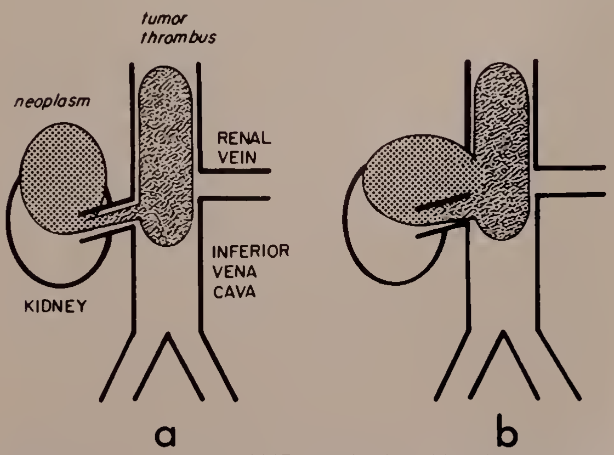

FIGURE 1. Initiation of VE may be by either intralumenal (a) or transmural (b) route. Once inside the cava, the TT continues unattached to intima.

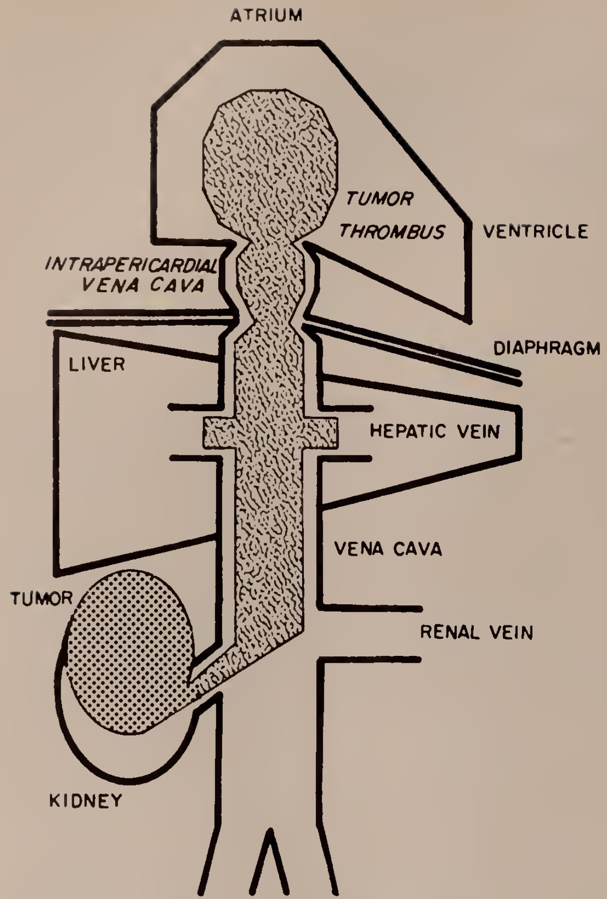

FIGURE 2. TT may ascend the whole length of IVC and even enter the heart. Budd-Chiari syndrome results in those rare instances when major hepatic veins are occluded. The TT is constricted when it traverses two natural anatomic narrowings, at the diaphragm and cavoatrial junction.

Rarely, the TT may emigrate to the contralateral renal vein.

Commonly, ascents within the IVC are short and do not reach the orifices of the hepatic veins. At times, the TT may fill the cava and even attain the heart, ending in the right atrium, right ventricle, or rarely, in the pulmonary artery. The neoplastic column in these situations ordinarily is unattached to the venous endothelium, but sometimes superimposed organized nontumor thrombus produces localized adherences (Fig 2).

Relationship of location and size of MRN to VE. Although VE may be engendered by an MRN of any size or location, its presence seems to be augmented by certain patterns.[14] On the right side, the likelihood of VE is appreciable, irrespective of tumor dimensions or location. On the left side, MRNs smaller than 5 × 5 cm, irrespective of location, are not likely to enter the renal vein and IVC. Those between 5 × 5 cm and 7 × 7 cm that arise from the inferior pole and pars intermedia exhibit a moderate tendency to invade the vein. When a tumor of the left kidney exceeds 7 cm in diameter, a 40% association with VE can be expected. Interestingly, there is no correlation between the magnitude of VE and its parent neoplasm.[13,15–18]

Laterality. The IVC is entered in only one fourth of the patients with VE originating from the left kidney. By contrast, the right renal vein is involved in three fourths of instances of VE associated with right MRN, and in two thirds of them, the IVC itself is penetrated.[3,14,19] The increased VE incidence rate on the right side may not simply reflect the greater frequency of tumor affecting the right kidney, but may be attributed to the shortness of the right renal vein and to the anatomic contiguity of the IVC with the right kidney. Conversely, on the left side, the TT might be impeded in its journey by the obstacles of aorta, spine, and the superior mesenteric artery straddling a longer renal vein. The reason for the right-sided predominance among all types of MRN is unknown.

There are two other factors that may explain the higher VE incidence rate from the right kidney:

1. Renal veins customarily display different entry angles into the IVC as well as differences in length. The left vein is horizontal, whereas the right vein slants cephalad. It is conceivable that this oblique angulation might favor tumor dissemination into the IVC more readily from the right kidney.

2. Autopsy reports of left MRN with VE are sparse. Nearly all of those we have read mention cancer cells colonizing some of the abundant collateral veins subserving the left kidney.[4,19,20–22] From this, it may be inferred that VE via the renal vein is obligatory on the right side because, for all practical purposes, this is the sole vascular outlet. On the left side, in contrast, a rich network of collaterals, a fortiori, offers alternative avenues for egress of carcinoma. Our survey has indicated a picture of left MRN presenting clinically with extrarenal metastases, independent of the coexistence of VE.[1,16,17,19–33] This observation also supports the contention that extrarenal cancer extension may be channeled locally by a single vein from the noncollateralized right kidney, while enhanced on the left side because of a variegated auxiliary venous drainage pattern.

Contrary to what is limned in anatomy textbooks, the renal veins do not face one another. One can speculate whether the increased right-sided frequency of VE might be related to the level at which the renal veins join the IVC. Such information was not forthcoming from the literature on MRN. In the articles where any reference was made regarding this feature, the left renal vein more often was described inserting at a higher level than the right one.[34,35] This is discordant with the preponderance of VE from the right side.

It should be noted that genuine VE has been encountered in the extremely rare context of neoplasia inhabiting a solitary or horseshoe kidney.[36,37] In the equally uncommon synchronous bilateral cancers, VE has, almost without exception, emanated from the right kidney.[24] There is one case report of bilateral renal cancers in which VE stemmed simultaneously from both organs.[33]

Topography of VE. In the majority, VE is restricted to the ipsilateral renal vein—from 8% to 55% of all cases of MRN.* Next in frequency is TT which climbs up the IVC—4% to 15% of the total number of MRNs and 24% to 60% of the instances of VE.† Most often, they consist of tumor excrescences that jut 1 or 2 cm into the mid-third of the IVC, but others go up to the stomas of the hepatic veins. A smaller percentage move further into the retrohepatic IVC.[4,8,17,26,58,60,61]

The occasional suprahepatic or supradiaphragmatic IVC extensions can be considered with intracardiac cases because often in this subgroup the crest of TT terminates at or beyond the caval-atrial boundary.[19,24,52,62–64]

The heart is involved in 40% to 50% of cases of VE. Three fourths of intracardiac TT are to the right atrium alone.‡ Exceptionally, TT prolapses from the atrium through the tricuspid valve into the ventricle.[13,19,22,26,30,58,78–87] There are rarer dramatic descriptions of huge cancerous growths peregrinating more distally through the ventricular outflow tract onto the pulmonary valve and even into the pulmonary lobar artery.[58,60,88]

Uncommonly, TT travels to the opposite renal vein or arcs caudad into the infrarenal IVC and into the iliac veins.§

Composition of the TT. As a foreign body in the bloodstream, the cancerous column incites deposition and agglutination of blood elements on its surface. Ensuing coagulation promotes progression of the tumor by furnishing a scaffold on which the carcinomatous cells can mutliply.[21,22,91] When tumor burrows into the vein wall from the outside, it inevitably elicits a local phlebitis, which is conducive to clotting. The TT in such a circumstance is apt to be polymorphous and friable, with cancer nests conspicuously enmeshed with clumps of fibrin. If the mass grips the caval wall as it rises, it may be endothelized. In contradistinction, TT that incepts from the renal vein is somewhat more homogeneous in texture and consistency and has a smooth periphery. The firm, cancerous matrix is enclosed in a slim envelope of connective tissue, and the amount of blood clot is meager. Coursing within either variety of endovenous growth is a maze of thin-walled, narrow, endothelium-lined corridors. These supply nutrition to the TT derived from the local blood milieu or from neovascular twigs of the vasa vasorum originating at the vascular attachment.

Histologic behavior of the TT. Hematogenously borne metastases to lung and bone are common with MRN as a consequence of both gross particulate and microscopic emboli. However, a histologic peculiarity of MRNs is their accustomed disinclination to violate intact intima.[20,22,91–98] Accordingly, the TT is usually either unattached or feebly adherent throughout its endovenous transit except at its origin.

From a surgical standpoint, the seeming ability of endothelium, endocardium, and myocardium to withstand incursion by MRN cells is what so often facilitates successful extirpation of most TT without recourse to concomitant resection of vascular parietes. Another practical implication is that inadvertent fragmentation of the TT, especially from its renal vein tether, may produce calamitous pulmonary embolism. In fact, there are numerous disconcerting reports of massive tumor emboli unleashed accidentally from manipulation of the renal vein or IVC during performance of nephrectomy.[4,7,15,22,58,95,97,99–107] On rare occasions, nonetheless, the dislodged piece of TT either undergoes resorption, becomes sequestrated by encasement with scar or calcium, or thrives as a metastasis in its new location.[98,108]

A diffusely adherent TT is less dependent on the renal arterial circulation. Its nutrition may be supplied in the main by the vasa vasorum of the diseased caval wall, as well as by the bloodstream itself. A TT of this sort is capable of proliferating autonomously when separated from the kidney and if transected during nephrectomy and not withdrawn, will persevere in its development.[24,25,30,65,109,110] No doubt, kindred VE "recurrences" have resulted from shreds of tumoral tissue left behind when intralumenal masses were curetted or "shaved off" instead of being removed together with the segments of cava to which they were bound.[22,25,31,34] Some persons have harbored such residual tumor for intervals of months or years before fatal carcinomatosis.[2,22,25,109,111,112]

Pathophysiology

Evolutionary sequences of circulatory obstruction. The dominant cephalad axis of travel of the TT is ascribed to the natural phenomenon of venous flow toward the heart. When stasis supervenes from total occlusion of the IVC, this directional orientation may be lost.[12,15,19,31,113,114] Nevertheless, the TT may swerve downward at the outset, or it may send a tongue of tissue into the other renal vein. This may be influenced by factors other than the centripetal venous currents alone.

Whether from external or internal migration, the intralumenal TT initially is molded by the tubular contour of the IVC. Eventually, it may lose its cylindric shape if the IVC becomes fusiformly dilated or otherwise contorted. The preservation of architectural form often persists even when the mass traverses the retrohepatic and intrathoracic sectors of the cava, presumably because the jetlike hepatic venous efflux tends to thwart the TT from infiltrating into the ostia of the major hepatic veins.

Higher up, the mass is constricted twice—at the caval hiatus of the diaphragm and at the eustachian valve—which makes its proximal portion relatively more occlusive. It is only then that either TT or incremental blood clot is prone to plug hepatic radicles. Strangely, this appears to be a fairly common accompaniment to left MRN.* Once the isthmus of the mass transgresses into the heart, it is subject to a supplementary set of hemodynamic forces. The ensconsed intracardiac TT seldom conforms exactly to the configuration of the cavity in which it lies, becoming instead roughly globoid or papilliferous.

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* References 1, 2, 4, 6, 7, 10, 15, 18, 20, 38–41.

† References 1, 4, 13, 16–18, 24, 25, 31, 34, 40, 42–59.

‡ References 8, 12, 13, 15, 19, 25, 30, 42, 43, 52, 58, 60, 61, 65–77.

§ References 12, 16, 17–19, 22, 25, 30, 31, 33, 41, 58, 60, 88–90.

Whether TT in the IVC produces obstruction or occlusion is predicated upon hemic and structural factors, including size, malleability, and degree of admixture with blood clot. A compact TT that is bulbous proximally may cause occlusion prematurely even when small, as may a polypoid mass of like dimensions composed largely of blood clot. In general, subtotal obturation of the IVC characterizes the majority of TT and is converted to outright obliteration only after the mass becomes large and blocks a long length of the vessel.

Effects of IVC interruption. From both experimental and clinical observations, it has been known that interruption of the IVC, depending on the level, may be either lethal or compatible with normal function.†

To summarize: (1) Occlusion of the infrarenal IVC is usually innocuous. (2) Occlusion of the IVC above the hepatic veins produces a uniformly fatal Budd-Chiari syndrome. (3) Abrupt occlusion of the suprarenal, infrahepatic IVC is followed by a high mortality rate. (4) Gradual occlusion of the suprarenal infrahepatic IVC, particularly after preliminary interruption of the infrarenal IVC, is well tolerated. (5) Gradual occlusion of the suprarenal infrahepatic IVC followed by right nephrectomy and ligation of the left renal vein at its entrance into the cava ordinarily does not entail permanent ill effects. (6) Either abrupt or gradual occlusion of the suprarenal infrahepatic IVC with concomitant left nephrectomy and ligation of the right renal vein leads to death from congestion and infarction of the right kidney.

Translated to the topic of VE with MRN, these facts serve to enunciate its pathophysiologic manifestations and prognostic connotations, as well as the limits of resectional surgery.

Since the evolution of most renal cancers is fairly slow, IVC obstruction evolves insidiously while alternative circulation is established through circumrenal collateral channels. This same process is present in situations where a large, slow-growing tumor obliterates renal parenchyma, making function contingent on drainage of the opposite kidney. Thus it is only with regard to iatrogenic nephrectomy and companion interruption of the suprarenal IVC that potential threat to life is controllable. As stated, the key determinant to morbidity and mortality and surgical management of MRN is the difference in venous drainage between the two kidneys.

Natural pararenal venous collateral pathways.[13,24,46,123–126] During embryogenesis, the primitive arrangement of bilaterally symmetric thoracolumbar veins is transformed into a drainage system that courses to the right of the spine and becomes the vena cava. Almost all of the vein buds on the right side are assimilated in this metamorphosis, leaving the ipsilateral renal vein devoid of tributaries, except for a gonadal or adrenal accessory branch. On the left side, in contradistinction, the embryonic anastomosis at metanephric level persists and is incorporated in the organization of the rudimentary left renal vein. As a result, an enormously complex network, with ramifications to vast expanses of the body, converges on the left kidney. The latter is at the core of myriad communications that link it with: the diaphragm, intercostal muscles, ribs and pleura; adrenal gland, ureter, and genitals; capsular and retroperitoneal tissues; lumbar, dorsal, axial, and appendicular musculature; intervertebral disks and ligaments; pelvic viscera; and the lower limbs.

It should be emphasized that the left renal vein itself, either through direct or indirect connections, is the receptacle for a fair amount of this colossal venous reservoir draining the abdominal and pelvic structures, diaphragm, and dorsolateral body wall. With slow blockade of the suprarenal IVC, these widespread vestigial reserves are called forth, joined by plexuses at azygos and portal outposts. This alternative venous drainage is less effective if the left renal vein is divided near the kidney hilus and is unable to sustain life if the left kidney is removed in combination with suprarenal IVC interruption.

Semeiology

It is well recognized that MRNs may attain considerable size without ever causing any symptoms or signs. Companion VE, likewise, may be silent clinically since less than one half of the cases produce a circulatory derangement. Clinical manifestations are variable and depend upon the range, completeness, and speed of vascular closure. Pivotal to their appearance is the activity of the collateral channels, which are mustered to take over the flow of venous drainage undergoing progressive blockade.

The nephrotic syndrome, which occurs in approximately one fifth of cases of VE, connotes obstruction of the suprarenal IVC. It is more frequent with left MRN or with TT from the right side crossing over into the left renal vein. Varicocele, which is cited so often in connection with MRN, probably results from cancer within the spermatic vein rather than from external compression of the latter by the tumor or by enlarged lymph nodes.[20] Of the diverse regions of the vena cava, occlusion of the retrohepatic section is most likely to cause the Budd-Chiari syndrome. Fortunately, such an event develops in less than 5% of cases of MRN with VE and usually relates to uncommon left-sided tumors.

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* References 1, 13, 16, 17, 21, 25, 26, 29, 30, 33, 58, 70–77, 87, 88, 109, 115.

† References 1, 13, 29, 31, 34, 41–43, 46, 90, 113–122.

Cardiac invasion may produce only minimal changes. In fact, fewer than one fourth of such situations are trailed by heart failure, and the majority are in patients with Wilms' tumor. Curiously, the very uncommon outcome of sudden death from incarceration of TT on the tricuspid valve has been described almost exclusively with hypernephroma.[67,80,84] Ascites and hepatomegaly may result from tricuspid valve malfunction and, therefore, should not be misconstrued as always signifying liver metastases or the Budd-Chiari syndrome.

Diagnosis

The migratory sequence of TT does not always depend upon the vagaries of caval circulation. Since MRNs are hemophilic and possess little affinity for vascular parietal invasion, the TT is self-perpetuating, even after the IVC becomes impervious to blood flow. Although we have not been able to correlate from the literature the different heights attained by TT with the duration of illness, such a temporal relationship surely must exist because TT requires time to climb the whole swath of the IVC. Logically, were MRN amenable to diagnosis sooner, VE could be confronted at its incipiency.

The paucity of clinical clues makes the recognition of VE dependent upon both noninvasive and invasive methods. Their value appreciably exceeds that of excretory urography, which does not indicate VE, except in the very occasional instance when the radiographic silhouette of the bladder is "teardrop" or "pear-shaped."[128] These additional screening techniques also furnish important data regarding concurrent tumor in lymphatics and other neighboring structures.

Ultrasonography. Since TT is echogenic, its outline and extent can be mapped by directional Doppler investigation or by gray scale ultrasonography.[32,50,62,77,129–135] In the Doppler technique, the Valsalva maneuver is induced purposely to discern echo changes that are an index of whether caval obstruction is partial or total.[135] The usefulness of nephrosonography studies is increased by conducting them in prone and supine positions. Despite this, VE in the right renal vein may be missed, either because it is obscured or because it does not produce significant alteration in blood flow acoustics.[130] VE in the left renal vein does not present similar difficulties of detection.

Ultrasound identification of VE in the heart is more sensitive by the two-dimensional than the M-mode method, which may not clearly image the right atrium.[64,73,79] Ultrasound is unable to differentiate TT from a bland thrombus or some other solid intravascular structure.

Computed tomography. The advent of computed tomography has been a boon to accurate noninvasive staging of MRN. Delineation of VE within the IVC can be accomplished with precision, especially when scanning is aided by intravenous injection of contrast medium.[37,51,136,137] With the computed tomogram, as with the ultrasonogram, the right renal vein may escape identification. Scans may be indeterminate when bland thrombus rather than TT exists or when the IVC is not actually invaded but is deviated or squeezed by a voluminous MRN. Thus CT scans cannot replace angiography but should be regarded as complementary to it in the exact determination of the expanse of VE (Fig 3).

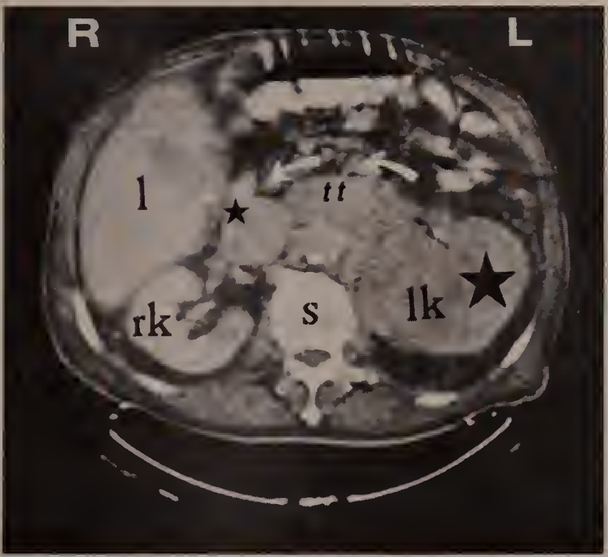

FIGURE 3. VE is accurately delineated by computed tomography. Here a neoplasm (large star) of the left kidney (lk) continues as tumor thrombus (tt) through the renal vein into the IVC (small star). The right kidney (rk) and liver (l), well depicted, are free of metastases. The whitish area in front of the spine (s) represents the abdominal aorta.

Selective renal angiography. The density and distribution of abnormal vasculature, the sweep or displacement of normal arteries, and either a "blush" or puddling of contrast liquid at certain sites give helpful hints about the morbid anatomy and cytologic makeup of MRN. Considered pathognomonic of VE is the arteriographic depiction of either filamentous or coarse striations radiating from the kidney hilus across tumor substance into the venous bed.[51,138–142] These reticular markings are the outlines of nutrient vessels within the neoplasm or are greatly dilated vasa vasorum (Fig 4). Their existence reflects the presence of VE, but their lack does not guarantee its absence. Another criterion that is cited as being highly suggestive of renal vein invasion is a prolonged vascular nephrogram without coexisting hydronephrosis or membranous glomerulonephritis.[141,143]

The merits of arteriography are somewhat amplified by inclusion of a venous phase for the sake of gauging the status of the renal vein. This may be gained by instilling a minute quantity of epinephrine

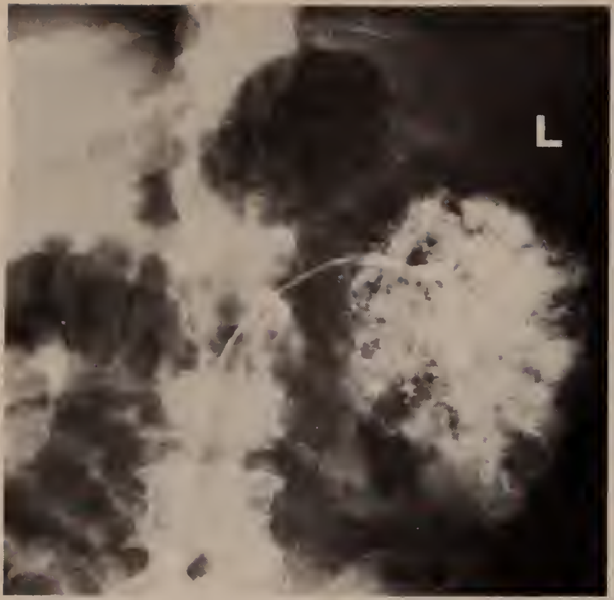

FIGURE 4. Selective arteriogram of left kidney displays hypervascularity typical of neoplasia.

intraarterially to delay the sojourn of the radiopaque medium through the normal renal circulation and to channel most of it into the nutrient vessels of the tumor.[23,138–140,144] Nonvisualization of the renal vein occurs in about 50% of normal kidneys and, therefore, is not an absolute sign of VE.[23,145,146] Drainage via venous subsidiary pathways, such as the gonadal vein, may be depicted radiographically. This "collateral vein sign" is presumptive evidence of VE, although not necessarily correlated with patency of the renal vein.[23,27,145,146]

Unfortunately, appraisal of VE by selective renal arteriography is beset by an array of problems, among them: (1) the large volume of contrast agent needed; (2) the high incidence of false-positive and false-negative interpretations; (3) nonvisualization of the IVC; and (4) possible embolism, particularly with the use of epinephrine. The latter may be from friction by the catheter tip or from actual injection of contrast material.[9,10,28,41,142,145–148]

Vena cavography. Despite information from other procedures, phlebography is indispensable for precisely charting VE.* Opacification of the IVC is very informative with respect to intralumenal obstruction, patency of hepatic veins, scarcity or profusion of collateral circulation, and invasion of pararenal veins (Fig 5). There may be many reasons for alteration of the IVC.[13,29,151,155] Common sense dictates that the exclusion of these causes be assured prior to categorically assigning the blame for IVC changes to MRN.

A prerequisite for all-inclusive cavography is visualization of the IVC in its totality from the iliac bifurcation to the eustachian valve. Clearly, complete visualization of the IVC requires both retrograde and antegrade injection of contrast material. In this fashion, one ensures against overlooking a distal tract of TT inside the heart (Fig 6).

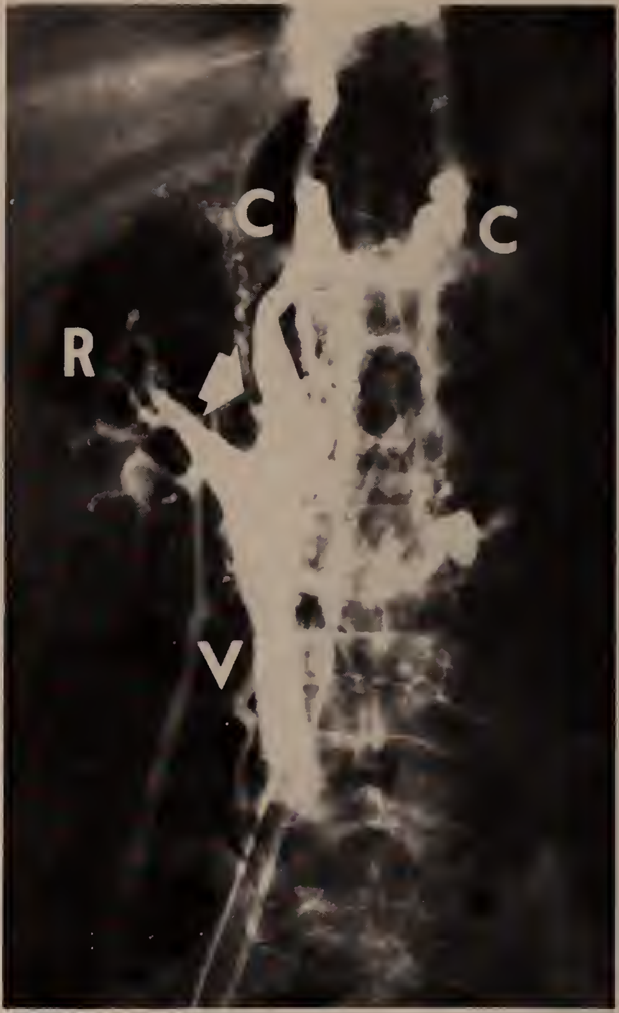

FIGURE 5. Cavogram shows patency of the infrarenal cava (V) and right renal vein (R). The left renal vein and suprarenal cava (arrow) are not opacified. Venous drainage above renal level continues via azygos and hemiazygos system collaterals (C).

Cavography demands attention to detail, both in execution and analysis, in order to avoid the following diagnostic pitfalls:[3,151,155–158]

1. The collapsible IVC may be spuriously "obstructed" from pronounced compression by the liver and diaphragm during the Valsalva maneuver or during crying. The latter may take place in children with nephroblastomas.
2. Streaming effects of the lighter unopacified blood may be mistaken for filling defects unless bilateral femoral vein infusion of contrast material is delivered.
3. Unless both frontal and oblique views are obtained, difficulty of differentiation between VE and translucencies may develop, resulting from accelerated

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* References 1, 10, 21, 31, 48, 141, 142, 144, 146, 149–154.

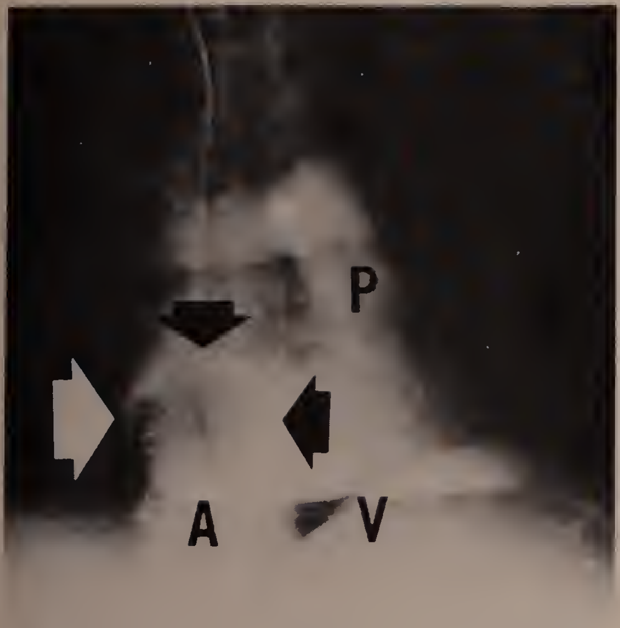

FIGURE 6. Intracardiac VE outlined by angiography. The margins of the mass (arrows) indicate that it is confined to the right atrium (A), without encroachment on either the ventricle (V) or pulmonary artery (P).

blood flow disgorged by hypervascular MRN with pathologic arteriovenous shunts.

Some radiologists have described biopsy of the TT by means of flexible forceps or by aspiration of bits of the mass via the catheters used for phlebography.[86,159–161] It is moot whether the information so gained justifies the risk of cardiac or pulmonary embolism. The few reported cases of catheter aspiration biopsy done to date have been uncomplicated.

Management

Percutaneous embolization of the renal artery of MRN with a variety of thrombosing agents is being practised increasingly for palliation of inoperable lesions. Although it may slow the growth of the tumor, the method has not been shown to significantly modify the behavior of VE. In fact, it may be theoretically objectionable because tumor necrosis consequent to starvation of blood supply could conceivably cause portions of the mass to be shed. Moreover, recanalization of the thrombosed artery is common, so that repeated percutaneous embolization may be necessary.

Nearly all tumor thrombi localized to the renal vein can be extirpated without induced embolism, providing they are not transected and are withdrawn in continuity with the MRN. Small VE lying a short distance inside the cava also can be evacuated through the renal vein with relative safety. The vein must be circumcised, not cut across, and then the TT isthmus can be dragged out of the cava through the venotomy by the sheer weight of the cancer-bearing kidney.

The ablation of most intracaval tumor thrombi mandates either prolongation of the renal venotomy or a separate *cavotomy*. However, thrombus which is adherent or infiltrates caval endothelium requires either *mural cavectomy* with excision of a portion of the wall, or *circumferential cavectomy* with resection of an entire cylinder of IVC.

In a few instances, successful removal of intracardiac VE has been accomplished through the abdominal route alone. It is far more logical in this situation to combine *atriotomy* and cavotomy and to operate with cardiopulmonary bypass. A review of the literature illustrates that almost 200 operations of this type have been reported to date. Strategic and tactical considerations relevant to this evolving field of surgical endeavor are discussed in detail elsewhere.[162]

Fortunately, the majority of MRN with VE concern the right kidney, because unsolved problems still plague the operative management of carcinomas which require left nephrectomy together with resection of the suprarenal IVC.

Illustrative case

The surgical treatment of most cases of MRN with limited VE is usually straightforward, once the precise diagnosis has been made. The indications for operation in other patients are less clear, as demonstrated in the following report.

A 63-year-old white man, previously in good health, began to develop ankle edema, increased abdominal girth, fatigue, and weight loss. These worsened steadily, and he entered Beth Israel Medical Center eight months later. His medical antecedents were noncontributory except for well-regulated, mild diabetes mellitus. Specifically, there was no background of cardiac, hepatic, or urologic disease, or of inordinate alcohol consumption. Significant physical signs comprised: cachexia; a grade 2/6 systolic murmur at the left parasternal border; obvious ascites with a fluid wave; 3-cm hepatomegaly; 2-cm splenomegaly; marked pitting edema of both legs and feet; and left varicocele. No flank mass was identified, and no abdominal bruit was heard. The only noteworthy laboratory findings were: hemoglobin, 11.5 g/dL; alkaline phosphatase, 364 IU; lactic dehydrogenase, 286 IU; calcium, 11.3 g/dL. Chest x-rays and electrocardiograms were unremarkable. Radionuclide scans showed homogeneous hepatomegaly, with minimal splenomegaly and normal uniform bone uptake. Paracentesis yielded serosanguineous fluid with specific gravity, 1.022; 900 red blood cells/mm^3; 34 white blood cells/mm^3; and no tumor cells or bacteria. The patient refused peritoneal or liver biopsy and was discharged on digitalis and diuretic therapy.

He was readmitted two months later because of progressive anasarca accompanied by profound debility and mental deterioration. Physical signs were the same as before, but much more accentuated, and a distinct caput medusae was now present. Laboratory tests demonstrated the following: persistently elevated alkaline phosphatase and lactic dehydrogenase; blood urea nitrogen, 22 mg/dL;

uric acid, 8.9 mg/dL; and calcium, 12.5 mg/dL. All other determinants, including assays for parathormone and carcinoembryonic antigen, were within normal limits. Computed axial tomography and ultrasonography outlined a large solid growth in the left kidney, propagating to the perinephric fat, left adrenal gland, paraaortic lymph nodes, ipsilateral renal vein, and the whole length of inferior vena cava to the heart. Selective renal arteriography disclosed a hypervascular mass in the left kidney, with venous extension. Cavography revealed complete blockage of the left renal vein and of the inferior cava just above the insertion of the right renal vein, with drainage via the azygos and hemiazygos system. Two-dimensional echocardiography was indicative of pronounced expansion of the inferior vena cava with constriction at the cavoatrial junction. Cineangiocardiography confirmed the existence of a huge mass protruding from the cava into the right atrium. Percutaneous transcatheter embolization of the left renal artery with gelatin sponge was undertaken. The medication regimen for hypercalcemia included hydration, indomethacin, mithramycin, and an oral dietary phosphorus supplement. The patient declined chemotherapy. Supportive management was rendered during the remaining two months until his death.

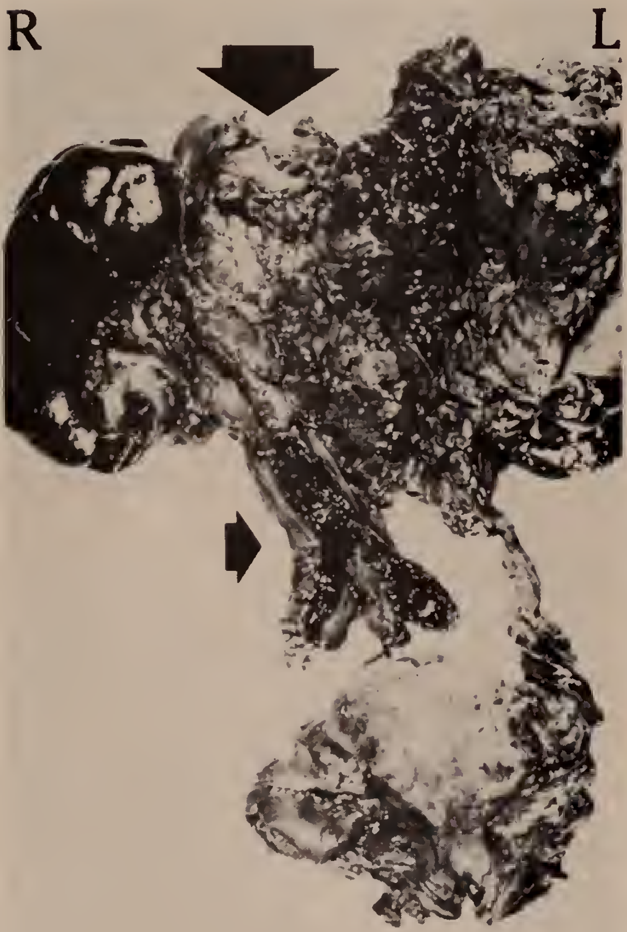

FIGURE 7. Huge neoplasm of left kidney (L) with VE into the IVC (large arrow). The right kidney (R) and its vein are uninvolved. The infrarenal cava and iliac veins (small arrow) contain organized blood clot.

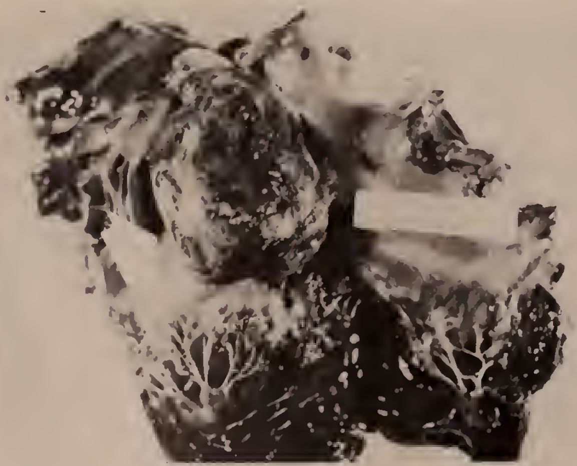

FIGURE 8. Globoid projection of VE in the right atrium.

At necropsy, the left kidney was found to be engulfed by an anaplastic renal cell carcinoma, 8 cm at the largest diameter, which penetrated the renal capsule and perirenal fat. It filled and dilated the renal vein and inferior vena cava and bulged into the right atrium, where it assumed a globoid shape and was firmly attached to the posterior wall. Many parts of the continuous TT were necrotic. The hepatic veins were patent. The iliac veins contained organizing blood clot. No extravascular metastases were discovered (Figs 7 and 8).

Comment

In brief, the patient died one year after the onset of vascular obstructive symptoms when the cryptic renal etiology was uncovered late in the course of his illness. The cancer had spread throughout the whole expanse of the inferior vena cava and had invaded the heart. Removal of the lesion with the aid of extracorporeal circulation was considered but rejected. This decision was made primarily on the basis of the left-sided origin of the neoplasm, coupled with the thought that hepatic vein occlusion existed. The clinical and radiographic picture was strongly consistent with Budd-Chiari syndrome. Had suprarenal cavectomy been necessary, surgical creation of a renoportal shunt to sustain venous drainage from the noncollateralized right kidney would not have been feasible, owing to lack of adequate venous outflow from the liver. Ironically, the hepatic veins were shown postmortem to be free of tumor or clot. The degree to which palliative transcatheter embolization of the renal artery served to retard the advance of the cancer and prolong the patient's life is speculative.

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DENTAL PROGRESS AND RECENT ADVANCES IN DENTAL SURGERY

Editor
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Surgical Periodontal Therapy

A brief overview

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Periodontal disease, the most common cause of tooth loss in the American adult population, represents the response of the dental attachment apparatus to the continuous irritation of bacterial plaque. Thus, treatment of the periodontal lesion must be aimed at thorough removal of plaque from the surface of the root of the tooth. Since plaque forms continuously and a chemical plaque inhibitor is not yet clinically available in the United States, it must be accepted that plaque removal is a continuing necessity if periodontal attachment levels are to be maintained. This is best accomplished by joint efforts of patient and dentist. (It should be stated that loss of periodontal attachment due to bacterial insult is a variable since the severity of the resultant lesion depends on the virulence of the bacteria and the resistance of the host.) Recognizing that removal of plaque represents our most successful current approach to treatment of the periodontal lesion, we will briefly analyze treatment modalities.

First and foremost, especially in the early stages of the developing periodontal lesion (gingivitis), plaque removal by the patient through the use of brush, floss, and other techniques in home care is the therapy of choice. Proficient home care, coupled with regular professional root planing aimed at the removal of accretions not eliminated by the patient, usually is all that is necessary to control the local inflammation. However, when pockets develop, the ability of the patient to reach the root surface becomes progressively more limited. For the sake of clarity: Periodontal pockets are the result of loss in attachment of fibers to tooth, leading to a deepened crevice between gingiva and root (Fig 1). Obviously, as part of the progressive deepening of the gingival crevice, there is concomitant lysis of the attachment fibrils and resorption of the crest of alveolar bone (Fig 2). When the crevice has reached a depth of 3+ mm, it is virtually impossible to remove accretions and plaque within the crevice by any of the currently practiced oral hygiene measures. When crevicular depth has reached 5+ mm, it becomes equally difficult for the dentist to completely remove plaque and calculus adhering to root surfaces by a curet or other accretion-removing device. Therefore, surgical exposure of root and reduction of crevicular depth become a necessity.

Such surgical procedures are essentially of two types: One is excisional, ie, gingivectomy, in which the soft tissue pocket wall is surgically excised and the root surface is exposed for easier cleansing. Obviously, an excisional procedure has many drawbacks, among which are increased gingival recession and a possible encroachment upon mucosa, making subsequent maintenance difficult. An alternate method is the flap procedure, with its many variations, which exposes the root surfaces and allows replacement of the flap at a predetermined level on

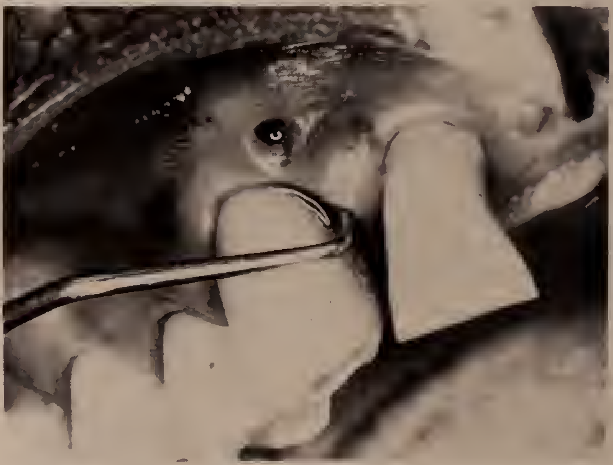
FIGURE 1. Typical clinical picture of a deep periodontal pocket. Inserted probe identifies depth of the loss of tooth/soft tissue attachment. Fistula is also evident.

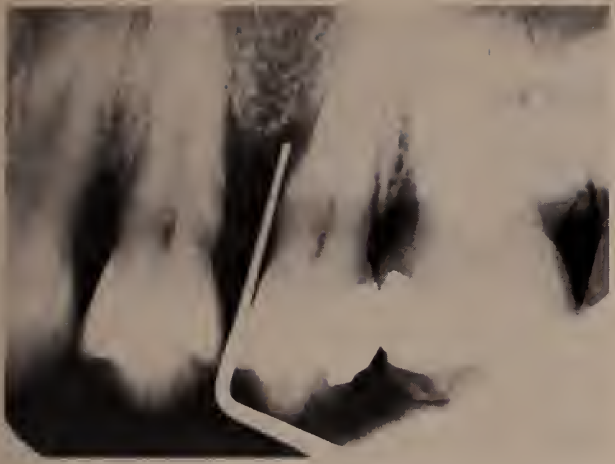

FIGURE 2. Typical radiogram of a periodontal pocket with probe in position demonstrating previous lysis of soft tissue/tooth attachment and resorption of the crest of the alveolar bone.

them (Fig 3). By this approach, one can also recontour osseous crestal structure to create subsequent improved soft tissue adaptation and, furthermore, attempt some potentially regenerative procedures. Among the most frequently used regenerative attempts is the osseous autograft to improve repair of the gingival attachment. The donor site for such a graft can frequently be found in edentulous areas of the mouth and the procedure does not necessitate significant additional trauma to the patient. While success with such procedures is limited, they are opening a new vista in regenerative periodontal therapy.

To quote a recent background paper on surgical therapy for periodontitis, "Surgical treatment . . . aims at restoring the supporting tissues to a healthy state and maintaining that state on a long-term basis. There are two categories of surgical therapy. One accepts the tissue destruction that has already occurred and is designed only to restore the supporting tissues to health at a 'reduced' level. The other attempts to repair some of the loss of attachment which has resulted from the periodontitis."[1]

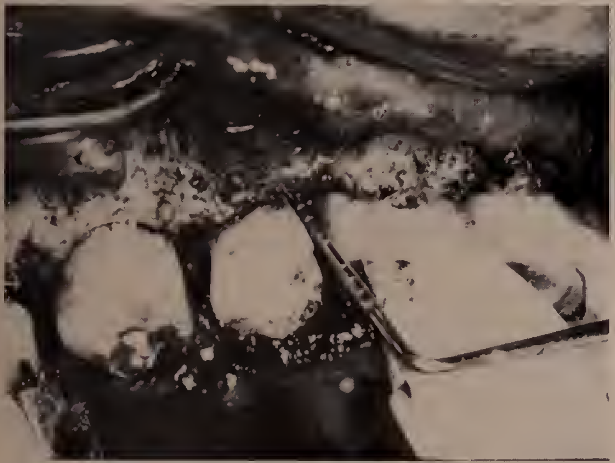

FIGURE 3. A flap procedure. Soft tissue has been elevated from facial alveolar plate and probe is placed in space between tooth and alveolar housing (an infrabony pocket). Root surfaces will be debrided as will the infrabony pocket prior to replacement of the soft tissue flap. Obviously, missing crowns will be restored.

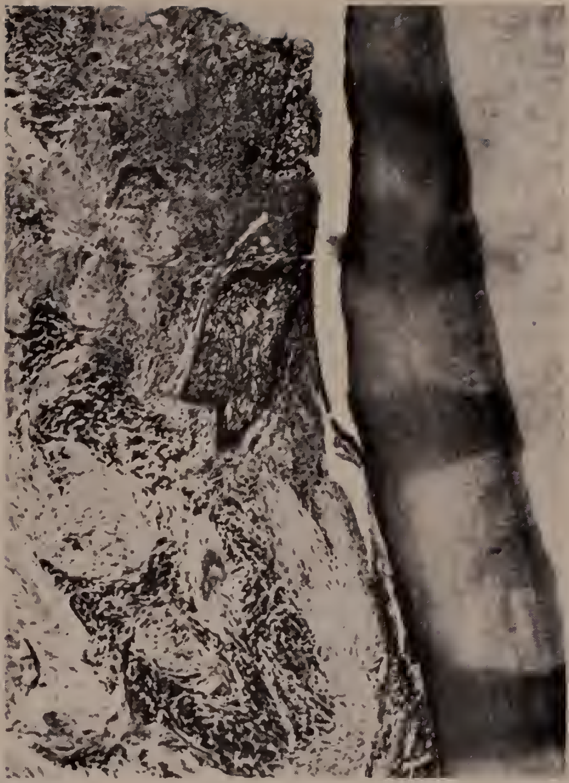

FIGURE 4. Typical histologic appearance of human gingival inflammation. This process, while part of the defensive response, also is associated with lysis of the gingival attachment.

The same workshop also concluded that periodontal surgery is an appropriate form of therapy in order to gain visibility and access for root preparations of local irritants adjacent to deep or tortuous pockets or in furcation involvements. In addition, it may provide a means of controlling disease when nonsurgical methods are ineffective.

In summary, current research suggests that gingival inflammation is a response to irritants found in bacterial plaque (Fig 4). Such irritants, if not removed, may cause continuing destruction of the attachment apparatus, leading to deepened crevices that cannot be adequately cleansed by oral hygiene methods and only with difficulty by dental therapy. Surgical procedures are thus utilized to create an environment in which both patient and dentist may remove irritants with comparative ease. If this is not done, continuing lysis of the attachment apparatus may lead to mobility of teeth and even ultimate tooth exfoliation. It, therefore, becomes self-evident that early plaque removal by the patient and professional support are the best known methods of reducing or eliminating progressive destruction of the attachment apparatus. However, techniques are available that can delay future loss of attachment by creating an environment in which plaque accumulations can be removed readily.

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Reference

1. Surgical therapy for periodontitis. Background paper, workshop sponsored by N.I.D.R., May 13, 14, 1981.

Degenerative effects of aging may be decreased by physical activity

At least some of the changes commonly attributed to aging are really caused by disuse (by inactivity) and as such are subject to correction, according to a West Coast physician who advocates exercise as a way to ward off some of the age-related disabilities.

In an article in this week's *Journal of the American Medical Association*, Walter M. Bortz II, M.D., compares the bodily results of physical inactivity in younger people to the decreased capacity of older people that is commonly blamed on the aging process. The results, according to Bortz, who is from the Department of Medicine at the Palo Alto (California) Medical Clinic, disclose striking similarities.

While he emphasizes that lack of physical activity is not the *cause* of the aging process, he suggests that no drug in current or prospective use holds as much promise for sustained health as a lifetime program of physical exercise.

Citing the example of a leg that is encased in a plaster cast for several weeks and which becomes withered, stiff and painful, he notes that such degenerative changes are common to many body systems, tissues and functions when the body is inactive for a period. Parallels also exist between bodily changes of astronauts in periods of weightlessness and changes due to inactivity, such as enforced bed rest.

In the cardiovascular system, inactivity can reduce the body's capacity to use oxygen efficiently. This capacity ordinarily decreases with age, but research has shown that this decline can be markedly reduced by a conditioning program. Increases in blood pressure in the elderly similarly may be related to inactivity. Bed rest, immobilization and weightlessness cause undesirable changes in the blood, bones, metabolism, sex hormones, central nervous system and other body components that may be lessened by exercise.

The striking association of disuse and accelerated aging in body components appears, as well, at the whole-body level. Bortz suggests that the principle of "practice makes perfect," as applied to the piano student, athlete and cook, also applies to the body, and that the biological law of "use it or lose it" should receive more attention where the human body is concerned.

Although experiments with animals have shown that regular exercise can prolong life, such a firm conclusion cannot be drawn about humans.

Dr. Bortz comments that "It is fair to observe that *Homo sapiens* has never had the opportunity to test the hypothesis relating exercise to longevity. Survival of the fittest to an advanced age is really untested. Through the long eons in which our forebearers were physically active as a necessity of survival, they died of starvation, injury and infection. In our current golf-cart age in which two of these major historic killers are largely controlled, we die of degenerative diseases, on which the impact of our physical inactivity may be considerable."

Professional Liability

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Much has been written concerning the malpractice crisis of the mid 1970s and the early 1980s. Precipitated by the withdrawal of the insurance vehicle by private industry, the crisis was temporarily resolved with the establishment of physician-sponsored mutual insurance companies and only a tinkering with the tort system in most of the larger states. The fundamental weaknesses of the present inefficient litigation system were not changed.

The emerging crisis of the 1980s is not the issue of an insurance vehicle but one of affordability. If the present trend continues, actuarial projections indicate that the most efficient insurance vehicle with its narrow base of insurers cannot underwrite at an affordable price a litigation system based on an adverse result in the absence of negligence. Mortal man cannot guarantee a perfect result.

It is not our intent to rehash many of the well-known facts regarding the inefficient litigation system, but to focus on the broader perspective of how the present system emerged from English common law and how we got into the present crisis, as well as to offer some thoughts on what we can do about it.

Historical background

Although disputes and their resolutions were recorded in the Greek classics, the precursors of English common law did not emerge until the first half of the 12th century during the reign of Henry I (1100–1135) when the first statutes of limitations were enacted.[1] Henry II (1154–1189); great grandson of William the Conqueror (1066), was alleged to be a strong king and developed innovations in criminal procedures. He attempted to establish the king's court as the instrument of all government in England.[2] There was a clash between the king's authority and canon law resulting in the tragic murder of Thomas Becket which was dramatized in the *Canterbury Tales*. When Henry II's son, Richard I (Richard the Lion-Heart), returned from the crusades, he strengthened the authority of the king's court. The compromise with canon law thereafter varied depending on who was on the throne, leading to clashes between church and state which finally led to the Reformation in the mid-16th century.

During the mid-13th century, Simon Montfort challenged the abuses of the monarchy. While he is remembered as the founder of the English Parliament, his revolt against the king and church resulted in his death as a martyr. Edward I (1272–1307) continued the reform of Montfort, and his administrative expertise removed feudalism from political life. He is referred to as the English Justinian.[2] His *Year Book* of decisions became known as the "common law," according to a conversation with E. A. Reed.

The "Calamitous Fourteenth Century" referred to in Barbara Tuchman's best seller, *A Distant Mirror*, describes this unruly, lawless chapter of history.[3] It was the period of the Hundred Years' War with France, interrupted periodically by five epidemics of the Black Plague, which reduced the population of England from four million to two and one-half million people. The earliest recorded negligent action brought in England was in 1374.[4] One of the earliest cases of malpractice under English law was recorded as follows: A veterinarian shoed a farmer's horse. The farmer sued because his horse walked with a limp. The judge ruled in favor of the defendant stating that the veterinarian should not be held liable for an adverse result since he had used the accepted standards of the time in shoeing a horse. Whether the depopulation of England by the Black Plague influenced this decision is not known, but it must have been apparent that the healing professions could not cure all the illnesses, nor should they be expected to always have a perfect result in each incident.

In 1369, the interface of the London civil authorities and the Master Surgeon's Guild in malpractice was written in the statute. The basic common law of malpractice was largely complete by the end of the 14th century; in effect it required the physician to be diligent to avoid negligence and to do all he could for his patient. He was not required to effect a cure or to possess extraordinary powers or skills. He was liable, however, if the patient suffered injury as a result of abandonment. The departure from this basic concept in America is one of the major reasons why we are in the present crisis. It is of interest to note that in 1394 arbitration was suggested as a method of settling the dispute between the popes in Avignon and Rome.[3 (p 521)] Today it is being considered as a forum to resolve malpractice litigation.

Medical profession's authority

In the early 17th century, the Royal College of Physicians controlled the licensing of physicians in London. The College was authorized to impose fines and could have imprisoned those who practiced without its sanction. This extreme power was quickly challenged and was frought with abuse. Our esteemed professions, including the clergy, were also subject to abuse. "Plantation owner William Bird wrote to England in the seventeenth century that one of the virtues of the American colonies was that they were free of those three scourges of mankind—priests, lawyers, and physicians."[5] Bailey[6] stated the Seventh Amendment to the American Constitution guaranteeing the right of trial by jury was a result of the resentment and bitterness against the Crown-appointed judges who generally favored the interests of his majesty, King George III. The exception to a trial by jury in malpractice was that both parties agreed to replacement of the jury by a judge.

In the wake of Blackstone's writings on English common law in the latter part of the 18th century, the concept of delegating public authority to professional organizations was adopted in America. McNaughton[7] documents that on April 4, 1806, our State and County medical societies were authorized by the New York State legislature as the licensing agencies of physicians. However, there was concern by organized medicine of the licensure of so-called irregular practioners, ie, homeopaths and eclecticists. To that end, in 1883 the Medical Society of the State of New York (MSSNY) had legislation introduced to establish a State medical examining board. After a series of amendments, defeats, and delays, the State legislature passed a bill in 1890, effective September 1891. This act provided:

> 1. No person may legally practice medicine in the State unless he has passed an examination conducted by the State Board of Medical Examiners and graduated from an institution teaching medicine approved by the Regents.
> 2. The Regents were given the authority to appoint the Board of Medical Examiners. This ended the role of organized medicine in granting medical licensure in New York State, and in effect to discipline its members.

In recent years, MSSNY has requested legislation that would grant more authority to discipline our physicians. The legislature consistently has refused this additional responsibility. Unfortunately, many of our legislators continue to believe that we do have this authority to discipline our physicians. In fact, they chided us for not doing so by enacting additional State physician-disciplinary legislation during the 1975–1976 crisis rather than restructuring the antiquated malpractice system.

About 1825, the concept of negligence was embodied in the Writ of Trespass. This required the plaintiff to demonstrate that the defendant deviated from a standard of conduct to protect the injured from unreasonable risk which was the "proximate cause" of the injury to the plaintiff resulting in injury or loss measured in damages.

Between 1860 and 1916, Weigell[8] reported there were 408 opinions handed down by the intermediate or highest courts although there were probably many more malpractice cases decided by the lower courts. Of this number, 145 were handed down between 1860 and 1900. Orthopedic problems of fractures and dislocations predominated in the early American cases. However, Stetler[9] reported general-surgery cases overtook orthopedic ones in frequency by 1957.

The classic case of Pike *v* Honsinger (1898) involves four distinct principles of law, outlined by Reed[10] as follows:

> 1. A physician, by taking charge of a case, impliedly represents that he possesses . . . that reasonable degree of learning and skill . . . ordinarily possessed by physicians in the locality . . . and which is ordinarily . . . necessary to qualify him . . . in . . . practicing medicine. . . . It becomes his duty to use reasonable care and diligence in the exercise of his skill and his learning. . . .
> 2. [H]e is under the . . . obligation to use his best judgment exercising his skill and applying his knowledge.
> 3. [H]e is bound to keep abreast of the times, and . . . departure from approved methods in general use, if it injures the patient, will render him liable.
> 4. [T]he giving of proper instructions to his patient in relation to conduct, exercise, and the use of an injured limb.

Although these dictums are still followed in the courts today, it is the liberalization in the interpretation of these principles that has expanded the horizons of professional liability. During the 1830s Alexis de Tocqueville, the French magistrate, was commissioned to study the legal and jail system in America. He noted the liberalization of the American judicial system from English common law. He predicted an extension of the litigation process. Some 140 years after de Tocqueville's prognostication, we experienced an explosion of litigation in America, not only in product liability but throughout all the professions and even including the ministry. Case law expanded the horizons of litigation, including those adverse results unrelated to negligence. More recently, there have been attempts to associate physician's services with marketing a product, comparable to a manufacturer. That America has become a litigious society is not only unique in our history but in all prior recorded history.

Comparison with other countries

Let us now look at some of the other countries in the western world to ascertain if this is a global phenomenon or an isolated instance in America. Focusing on professional liability (malpractice) in England and the commonwealth countries, contingency fees there are not permitted except in two of the Canadian provinces. Trial is by the magistrate and not by jury. The magistrates are experienced in litigation and recognize that there are inherent risks in medicine. While the malpractice premiums for physicians in England have increased in recent years, the high-risk surgical specialists pay about $300 a year for coverage.

A few years ago a critic responded to our analogy of the great discrepancy in premiums in England and the United States by stating that the English system provided for a "Peer Inquisition" of the defendant physician and required him to justify his actions. Such a peer review could result in the physician's loss of license to practice. Our critic apparently did not know that in New York there is a body, the State Board of Professional Conduct, which responds to complaints against physicians and makes the recommendations to the Board of Regents. The Regents have the power to revoke a physician's license. The State Board of Professional Conduct has had no impact on the escalating malpractice premiums in the past five years. Furthermore, the Medical Mutual Liability Insurance Company, a physician-owned, nonprofit company, does a comprehensive investigation of its insured who have a poor loss record, and at times it has increased the premiums of those physicians who fail to perform according to acceptable standards. Clearly, it is not the Peer Inquisition panel in England that keeps the rates low but other factors: ie, no contingency fees, no trial by jury, and adjudication by competent magistrates. These and other restrictions in the English judicial system contribute to the difference in insurance premiums between the United Kingdom and the United States.

In 1975, according to Cooper,[11] Sweden introduced a nationwide, no-fault patient-injury compensation plan. The plan was financed from a general revenue tax at the cost of less than 50 cents per citizen. However, Sweden has a social welfare system that provides for hospital and physician services *in toto.* Although the frequency of court awards was high, the severity of the award was low. The highest award paid for an injury was under $10,000. Physicians' malpractice premiums in 1975 were $25 regardless of specialty. There were no contingency fees. If the patient failed to win the suit, he had to pay defendant lawyer fees, unless indigent, in which case, the public legal aid service paid legal fees. Disputed claims were referred to a special panel. If the panel's opinion was not accepted, the question was referred to binding arbitration.

Trends in the United States

It is only in the litigious United States that the astronomical premiums and awards threaten business and the professions. It is the liberalization of our legal system, which has not occurred in any other country in the western world, that has evoked this litigation crisis. In fact, "in the rest of the world governed by Anglo-Saxon law roots, it is illegal or unethical for the lawyer advocate to hold a financial interest in the outcome of the litigation."[12] Recently in the United States, a federal program provided for the legal advocate on behalf of the poor, somewhat comparable to Medicaid for health care. When a judge ruled the attorney could not also share in the award to the poor (contingency fee), the news media reported it sent a shock wave through the legal establishment created to handle litigation for the poor. Where is the *noblesse oblige* of the legal community? It would appear that the issue is not the right of the poor to have access to the courts, which was the prime reason for the contingency fee, but rather the financial return to the legal advocate.

It is only during the last two decades that the malpractice premiums have exploded and threatened those practicing in the high-risk specialties. In the 1930s, few sued. Following World War II, premiums in the surgical specialties were only a few hundred dollars. By the late 1950s, premiums had almost tripled although the number of events, claims, and suits had only doubled. "Doctor's (malpractice) insurance premiums have increased 3,731% since 1959 in New York, not counting the latest request" (Dr. Schwartz). In contrast, the case load in New York has only doubled. This observation reflects only one thing—huge awards in settlement of cases. The highest-risk surgical specialist in the Greater New York area now pays $36,000, and if the actuary is correct, the premium for 1982–1983 will be 73% over the current rate.

What has happened? Clearly, it is not the result of poor quality of medical care. The decades since World War II have been an age of medical achievements with greater scientific and technological advances than in all prior recorded history. The astronomical costs of litigation is unique in the United States and not experienced in any other country in the western world. The logical conclusion is that our liberalized, antiquated legal system is the root cause of this malpractice crisis. Major reforms of the system are imperative!

Critics of the litigation system in the United States allege many reasons for the crisis. These may be real or imagined depending on one's viewpoint. Topping the list are contingency fees, trial by jury, expanded case law, astronomical awards, and liberal judges.

Other criticisms indicate that there are too many lawyers, that we have a no-fault automobile insurance, and that the deregulation programs are turning the lawyer's attention toward malpractice litigation. Many legislators are lawyers and have a vested interest by virtue of referral fees; judges are often biased by having been on the other side of the bench. The list is legion, but the foregoing illustrates the unhealthy rancor that exists.

Consumer critics of the medical profession allege the following causes: impersonal care; patient care shifts from the office to the emergency room of the hospital; increased specialization; excessive physician fees; failure to obtain what many patients think should be a desired or perfect result; the myth of excessive, unnecessary surgery promoted by the news media; and the stigma of the affluent physician.

At this point, it is appropriate to state that: (1) the expansion into medical care by government and private insurance has made medical and surgical care more available in recent years; (2) scientific and technological advances in recent decades have made sophisticated care available to all; (3) unrealistic expections of cure have been touted erroneously by the media; (4) perfect results are not always possible, since physicians are not infallible; and (5) the legislature has denied the authority for the medical profession to discipline its members.

The private insurance industry has been cast as the villain by the trial lawyers. While the profit motive played a small part in the etiology of the 1975–1976 crisis, the singular, overriding cause then and now was the inefficient and antiquated judicial system. The physician-owned, nonprofit Medical Mutual Liability Insurance Company (MMLIC) has demonstrated that this low-cost, efficiently operated insurance company cannot provide affordable rates in the present litigious climate without substantial malpractice reform, namely, reform of the tort system.

While we may be biased in reporting criticisms of the litigation system, it is not our intent to bypass the medical profession. The following suggestion is offered in an attempt to minimize accidents and adverse results. Patient safety programs should be expanded. The profession itself, the hospital associations, and the liability insurance companies (especially MMLIC) have developed sophisticated educational programs. These programs are made available to all physicians—to specialty societies, county medical societies, and hospital medical staffs. Perhaps attendance should be mandatory for all professional liability policy-holders, including residents, at these seminars. The Florida experience has demonstrated the value of required attendance.

An accurate, comprehensive, and readable medical record is the best defense in a court of law. Some physicians foolishly say, "what I don't write down can't be used against me." Quite the contrary is true. If it is not recorded, the allegation will be that it was not done.

Areas of vulnerability

A review of our insurance files has uncovered areas of vulnerability for our physicians. While the following items do not indicate substandard care, they may have an unfavorable impact on the defendant's credibility on the witness stand and the eventual outcome of the case. Retrospective review yields these observations:

1. Informed consent
   - Is too often vague and not comprehensive
   - Should include that there is no guarantee of results; should also include in-office consent
   - Should not be relegated to the resident or nurse but is responsibility of the physician
   - Should include that alternate forms of treatment exist, possibility of complications, and realistic appraisal of risk, eg, cardiac or vascular
   - Is often too optimistic appraisal by the physician
   - Is often outdated
   - Sometimes is not obtained before doing procedures, eg, colostomy or resection
2. Hospital and office records
   - Are critical for defense and either a crutch, or, often, an Achilles' heel
   - Admission notes often scant, and progress notes often nonexistent
   - Records illegible and data not pertinent regarding patient's progress
   - Chart cluttered with irrelevant, verbose notes by nonmedical personnel
   - Operative reports by the resident often inaccurate and incomplete, and not corrected by attending surgeon
   - Indications for the surgery not in the progress notes
   - Status of patient and wound at time of discharge not recorded; often, wound not inspected at time of discharge
   - Attending surgeon not making notes on chart yet billing for services
   - Failure to dictate operation report promptly
   - Failure to dictate a good, comprehensive discharge summary
3. Failure to diagnose conditions such as neoplasms, thoracic outlet syndrome
4. Inadequate indications and work-up for surgery
5. Failure to have appropriate consultations in poor-risk, complicated, or critically ill patients
6. Inadequate care by covering physician
7. Minimal documentation by attending physician in service cases
8. Signing out charts in which the attending physician did not render the care
9. Pressing bill collection through collection agencies when there is an adverse medical result; lawsuits often initiated by this
10. Loose talk in corridors and elevators regarding patient care
11. Tampering with records—extremely hazardous

These points may be summed up in the following dictum: Good rapport between patient and physician is essential for good patient care.

Quo vadis?

We are now at the crossroads in professional liability. The continued apathy of our legislature regarding tort reform will lead to financial disaster for the liability insuring companies and further escalation of insurance premiums. The concept of spreading the risk of liability insurance among the entire population similar to hospital insurance is the first small step to alleviate the problem. The narrow base of physicians and hospitals cannot support the liberalized ethos of our judicial system to solve a social problem by adjudicating high and unconscionable awards for adverse results unrelated to medical negligence. The present unresolved course has led to an exodus of our young physicians and early retirement of our older physicians. Those physicians who elect to remain will pass on the increasing costs of premiums to the public who can ill afford to pay for even a modest increase in health care costs. Clearly, this course is not in the public interest.

Milton Rosenberg, M.D., current President of MSSNY, addressed this issue stating "it is appropriate to require society to participate more directly in the funding of the system." Accordingly, MSSNY recommended legislation encompassing a Medical Catastrophe Fund, a proposal to shorten the adjudication process and to eliminate spurious or nuisance litigation.

There is very little historical background for the no-fault medical liability insurance concept in the United States. The concept is reasonable but would probably be ineffective as has happened with no-fault automobile insurance. For instance, the base dollar level is set so low that claims of any substance would proceed through the courts and not be efficient. The smaller claims could nickel-and-dime the industry into higher premiums. The same sequence would probably happen with professional liability because the vested interests would water down legislation and impair its intended cost effectiveness, and furthermore clog the court calendars.

There is a historical precedence for arbitration:

> Arbitration is a very ancient mechanism for resolving disputes. It has been neglected in this country. Arbitration began at least as far back as Homer, was used by the Phoenicians and later by the Hanseatic League. In my travels, I have found in many countries that something in the nature of arbitration is the dominant method of settling disputes. It is generally cheaper and speedier than a trial, causes less wear and tear on the participants and will very likely produce a more satisfactory result. Unless the experience of all these other societies for hundreds of years is wrong—and I don't believe it is wrong—we have been neglecting a very valuable tool . . . arbitration is an alternative form of the adversary process.

These quotations are not the sentiments of disgruntled physicians but are statements of the Honorable Warren E. Burger, Chief Justice of the Supreme Court.[13]

The American Arbitration Association was founded in 1926 and is known throughout the world. It is a nonprofit, nongovernmental, educational agency with offices throughout the United States. It will provide an impartial arbitration panel from which parties will jointly select their arbitrators. In recent years, impartial arbitration has been used more frequently by business, labor, government, racial, religious, and professional organizations as a better way to settle disputes. Arbitration is not only permitted in New York but is encouraged by State law. Recently, a Michigan appellate court affirmed that an arbitration agreement between the hospital and the patient was valid. During the malpractice crisis of 1975–1976, a Gallup poll indicated the Americans questioned favored the arbitration procedure more than two to one in settling medical and surgical care disputes.

If arbitration is so prevalent throughout the western world, why hasn't it caught on in America in settling malpractice cases? During the last crisis, MSSNY, the Hospital Association of New York State, and the American Arbitration Association launched a voluntary, contractual, binding arbitration program. Prestigious attorneys and the Association of the Bar of the City of New York were most cooperative. The litigation interests did not quarrel with its usage for the small claims and saw no conflict with the right to jury trial, but they were adamant against its application in claims over $25,000. This is reminiscent of the same conflict with no-fault automobile insurance. In California, the vested interests have used delaying tactics to prolong the arbitration process in attempts to denigrate arbitration. In New York, disguised legislation was introduced to outlaw arbitration between the patient, the physician, and the hospital without even mentioning arbitration. Fortunately, our legislators defeated the proposal. If legislation is not forthcoming to spread the risk for the premium base, we may be forced to launch a program for voluntary, contractual, binding arbitration. It may be a thorny route, but it may be the only path leading out of the malpractice jungle.

During the past few decades the scientific and technological explosion has controlled many diseases and brought hope of cure. Today, the physician is being sued for adverse results totally unrelated to negligence. The litigation system is being used to solve social problems, and this is uninsurable in the present litigious society. "*Caveat emptor*—let the buyer beware" has been replaced by "*caveat fabricator*—let the maker beware."

In the current litigious climate, the physician-hospital narrow base of funding cannot finance at an affordable cost the present system of high awards for adverse results unrelated to negligence. The alternative, short-term accounting proposals are not a solution. The Superintendant of Insurance may opt for political expediency and authorize a lesser percentage increase. "Claims made" policies with progressive increased premiums is only installment purchasing. "Claims paid" accounting also is risky and merely postpones the inevitable collapse of the funding mechanism. The solutions appear to be: to broaden the base of funding, to establish a substitute tribunal to replace the current, inefficient court system, and to make substantive changes in the tort system.

During each of the past ten years, MSSNY has introduced legislative packages for malpractice reform with only minimal success. The State Senate has been very receptive to the proposals, but they have been blocked in the Assembly. Defense attorney Dennis Haran[14] expressed it well: "the state legislatures are not going to solve the crisis. Their members are looking toward the day they leave public office. You are among their markets."

The legislature failed to pass either the necessary tort reform or the medical malpractice catastrophe fund at the 1982 spring session. While the legislature fiddles, the physicians, hospitals, and consumers continue to burn.

Conclusion

The historical background of professional liability (malpractice) has been summarized. The liberalization of the judicial process in litigious America leading to our recent professional liability crises has been outlined. Alternate proposals that we believe will serve society have been proposed.

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Medical • Legal Observations

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Nurse Practitioner Legislation in the United States

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Commencing with a series of hearings held in New York State in September and October, 1981, the Senate Health Committee, the Assembly Higher Education Committee, the Assembly Health Committee, and the Education Department have endeavored to develop legislation to provide for the expanded practice of nursing in New York State. In early 1982, a day-long collegium was held in Albany to review a wide range of issues involved in the development and drafting of such legislation. Participating in the discussions were representatives from the nursing profession, the Medical Society of the State of New York, the Hospital Association of New York State, and other interested parties including the medical specialties of anesthesiology, family physicians, and internal medicine.

The Division of Research and Development of the Medical Society of the State of New York in conjunction with the Society's Division of Governmental Affairs commenced a survey, in the fall of 1981, of nurse practitioner (NP) legislation enacted in other states to formulate specific recommendations on proposals and provisions being advanced in New York State. As a result of information gathered in the survey, a series of recommendations were formulated which were presented to the legislative committees and their staff at the collegium and in subsequent communications.

A final joint-committee report based on issues discussed at the collegium was issued in May and shortly thereafter a bill (S–6650-Lombardi and A–11922-Siegel) was introduced into the legislature. This bill, however, failed to include several major recommendations advanced by the Medical Society of the State of New York; consequently, the proposed legislation currently being considered by the New York State Legislature is being opposed vigorously by the State Medical Society.

NURSE PRACTITIONER LEGISLATION IN THE UNITED STATES

		Education				Physician					
	Definition	Special	BA/BS	Licensure		Supervision		Protocols			Joint
State	in Statute	Course	Degree	Certif	Exam	Collab	Superv	Written	Approved	Prescriptions	Authority
ALABAMA[1]											
ALASKA	Yes	Yes		Yes		Yes		Yes	Yes[2]	Limited	Yes
ARIZONA	Yes	Yes		Yes	Yes	Yes	Yes			None	
ARKANSAS	Yes	Yes		Yes		Yes	Yes	Yes	Yes[3]	None	
CALIFORNIA	Yes	Yes		Yes				Yes		Limited	Yes
COLORADO	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	None	Yes
CONNECTICUT	None										
DELAWARE	None										
FLORIDA	Yes	Yes	Yes	Yes			Yes	Yes		None[4]	Yes
GEORGIA	Yes	Yes	Yes	Yes			Yes	Yes		None	
HAWAII[1]											
IDAHO	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes[5]	Limited[6]	Yes
ILLINOIS	None										

State	Definition	Education		Licensure		Physician Supervision		Protocols			Joint
	in Statute	Special Course	BA/BS Degree	Certif	Exam	Collab	Superv	Written	Approved	Prescriptions	Authority
INDIANA[7]	Yes	Yes								None	Yes
IOWA	None										
KANSAS	Yes	Yes		Yes		Yes		Yes[2]		None	
KENTUCKY	Yes	Yes		Yes		Yes	Yes	Yes		None	Yes
LOUISIANA[1]											
MAINE	None										
MARYLAND	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	None[8]	Yes
MASSACHUSETTS	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	None	Yes
MICHIGAN	None										
MINNESOTA[1]											
MISSISSIPPI	Yes	Yes		Yes			Yes	Yes	Yes	Limited[9]	Yes
MISSOURI	None										
MONTANA	None										
NEBRASKA	Yes	Yes		Yes	Yes	Yes			Yes	None	Yes
NEVADA	Yes	Yes		Yes		Yes	Yes	Yes		None	Yes
NEW HAMPSHIRE	Yes	Yes		Yes		Yes				Limited	Yes
NEW JERSEY	None										
NEW MEXICO	Yes	Yes		Yes			Yes			None	
NEW YORK	None										
NORTH CAROLINA	Yes	Yes		Yes			Yes	Yes	Yes	Limited	Yes
NORTH DAKOTA	None										
OHIO[7]											
OKLAHOMA	Yes	Yes		Yes		Yes			Yes	None	
OREGON	Yes	Yes	Yes	Yes		Yes				Limited	Yes
PENNSYLVANIA	Yes	Yes				Yes	Yes	Yes		None	Yes[2,4]
RHODE ISLAND	None										
SOUTH CAROLINA	Yes	Yes		Yes	Yes		Yes	Yes	Yes	None	Yes
SOUTH DAKOTA	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Limited[10]	Yes
TENNESSEE[7]	Yes			Yes			Yes			Limited	
TEXAS	None										
UTAH	Yes	Yes	Yes			Yes		Yes		Limited[11]	
VERMONT	Yes	Yes[4]					Yes			None	Yes
VIRGINIA	Yes	Yes		Yes			Yes	Yes		None	Yes
WASHINGTON	Yes	Yes		Yes			None required			Limited	Yes[12]
WEST VIRGINIA[1]											
WISCONSIN	None										
WYOMING[7]											

Key:
1—State's information incomplete.
2—Approval by state medical board.
3—Board of Nursing may review.
4—Joint board must approve regulations.
5—Copies must be submitted to Board of Medicine.
6—Must obtain special approval.
7—State's information not sent.
8—Regulations allow prescription, but statute does not.
9—Controlled by written, approved protocol.
10—In accordance with practice agreement.
11—As authorised by protocol developed with physician.
12—Board of Nursing only.

In developing the accompanying chart, several key features of legislation enacted in the various states were identified for comparison purposes. Where available, provisions of regulations as well as legislation were examined and included to develop, as accurately as possible, a general picture of the framework governing expanded practice in each state. Every effort was made to verify and complete the chart and the supplementary explanatory information; however, certain gaps remain, as noted on the chart. The following text gives specific information from responding states, in sections corresponding to each column heading.

Definitions

Alaska. "Advanced nurse practitioner" means a registered professional nurse who by virtue of specialized education and experience has become certified to perform medical, therapeutic, or corrective measures as authorized by regulations promulgated by the Board of Nursing.

Arkansas. A licensed RN who has been authorized by the State Board of Nursing to deliver health care and engage in activities, under the direction of a physician, specified in Nursing Rules and Regulations.

Florida. "Advanced Registered Nurse Practitioner": a licensed RN with added knowledge and skills gained through an organized postbasic program of study and clinical experience under the supervision of a qualified preceptor. Advanced practice is defined.

Idaho. Licensed professional nurse with specialized skill and experience who is authorized by rules and regulations to provide certain health services.

Indiana. RN qualified to practice in a specialty role based on additional knowledge and skill gained through a formal organized program of study and clinical experience; medical acts as approved by Board of Nursing and Medical Licensing Board.

Maryland. RN who is certified to engage in expanded functions under the terms and conditions of a written agreement.

Massachusetts. Provides for additional acts by a nurse with appropriate education as approved by the boards of medicine and nursing.

Mississippi. Disallows acts of medical diagnosis or prescriptions of medical, therapeutic, or corrective measures, except as may be set forth by rules and regulations promulgated jointly by the State Board of Medical Licensure and the Mississippi Board of Nursing.

Nebraska. RN who has completed an advanced course of study which provides additional knowledge and skills.

New Mexico. Licensed RN who has satisfactorily completed a postgraduate program designed for the education and preparation of nurse practitioners.

North Carolina. Nurse who has received approval to perform medical acts, tasks, or functions.

Oklahoma. RN who has successfully completed a formal, approved program of study.

Pennsylvania. Acts of medical diagnosis or prescription of medical, therapeutic, or corrective measures may be performed by persons licensed pursuant to the "Professional Nursing Law" if authorized by rules and regulations of the Board of Medicine and the State Board of Nursing Examiners.

South Carolina. RN who has completed an advanced, organized education program and demonstrates advanced skills. Acts to be performed must be jointly approved by nursing board and physician consultants.

South Dakota. Person duly authorized under a special chapter of the law to practice the specialty of nurse practitioner as defined. Practice subject to joint control and regulation of Board of Nursing and Board of Medical and Osteopathic Examiners.

Utah. RN who has added knowledge and skill gained through an organized program of study and clinical experience and has extended practice into the area of primary health care.

Virginia. RN who has satisfactorily completed an approved NP program and has been certified by the Joint Boards of Medicine and Nursing. Regulations promulgated by joint boards.

Educational requirements

Alaska. One academic year with classroom and clinical components and awards a certificate.

Arkansas. Satisfactory completion of an NP educational program or certification by an appropriate specialty association approved by the nursing board or graduation from a master's degree program in a nursing clinical specialty area.

Florida. Specialty practice requires postbasic educational programs or master's degree.

Idaho. Must have a baccalaureate degree and have completed an accredited program and have an acceptable score on a qualifying examination.

Indiana. Requires additional knowledge and skills gained through formal, organized program of study and clinical experience or equivalent as determined by the Board of Nursing.

Maryland. Must complete a program for preparation of nurse practitioners approved by the nursing board and pass an examination.

Massachusetts. After January 1, 1982, programs must be equivalent to one academic year. Otherwise, must have completed a formal educational program preparing for expanded practice.

Mississippi. Requires graduation from a recognized, accredited nurse practitioner program.

Nebraska. One full-time academic year with classroom and clinical training.

New Mexico. Must have completed a postgraduate NP program.

North Carolina. Satisfactory completion of a formal course or courses as approved by the Board of Medical Examiners including at least four months of didactic training and four months of supervised clinical experience.

Oklahoma. Requires completion of a formal program of study approved by the Board of Nurse Registration and Nursing Education, designed to prepare nurses to perform in an expanded role.

Pennsylvania. Requires that nurse be certified in a particular clinical specialty area.

South Carolina. Must have completed an advanced organized education program acceptable to the board and be certified by an established authority on completion of a recognized formal program of study and specialty board examination.

South Dakota. Must have completed an approved NP program and passed an examination.

Utah. Must have a baccalaureate degree in nursing and have completed an educational program in nursing to prepare NPs within or beyond a BA degree.

Virginia. Must have satisfactorily completed an approved program designed to prepare NPs and be currently certified, where applicable, by an association recognized by the Boards of Medicine and Nursing.

Certification/ licensure

Alaska. Certification in specialty area granted by a national certification body.

Arkansas. Qualified RN may be licensed as a "Registered Nurse Practitioner"; unlawful if not so licensed.

Florida. Certification indicating title and specialty area issued by Board of Nursing; prohibits practice as an NP by uncertified persons.

Idaho. Must be "Approved"; approval must be renewed biennially.

Indiana. No special provisions.

Maryland. Must apply for and receive a certificate from the nursing board; renewable every two years.

Massachusetts. Must obtain authorization from the board, also must have certification by a nationally recognized accrediting body.

Mississippi. Details for certification not in materials received.

Nebraska. Must be certified and pass an examination.

New Mexico. Must be certified and endorsed by the board.

North Carolina. Must apply for approval with Board of Medical Examiners.

Oklahoma. Details for certification not in materials received.

Pennsylvania. Licensed RN who is certified by medicine and nursing boards in a particular clinical specialty area.

South Carolina. RN must be certified by an established body on completion of a recognized formal program of study and specialty board examination.

South Dakota. Must be certified and pass an examination, if required by the boards of medicine and nursing.

Utah. Does not provide for any special certificate or license, but recognizes national certification in a specialist or generalist area approved by the Board of Nursing.

Virginia. Requires certification by Joint Board of Medicine and Nursing.

Collaboration/ supervision requirements

Alaska. Must submit documented evidence to State Medical Board of an established collaborative relationship with a licensed physician that includes availability of direct communication, consultation, and referral; must immediately report any change.

Arkansas. Activities must be performed in collaboration with a licensed physician under his direction; must practice in accordance with written guidelines which shall specifically address the degree to which supervision, collaboration, and independent action are required.

Florida. Acts shall be performed under the general supervision of a licensed physician within the framework of standing protocols which identify the medical acts to be performed.

Idaho. Must be supervised by a physician. Limited acts may be performed prior to consultation with a supervisory physician. Must have a written agreement with a supervising physician and an alternate supervising physician providing for periodic review and regularly scheduled conferences.

Indiana. No special requirement.

Maryland. Requires a written agreement with a physician providing for referrals, guidelines, periodic review of diagnosis and corrective measures employed, consultation, and designated alternate physician.

Massachusetts. In a physician's office, requires direction by a physician in accordance with guidelines; in an institutional setting, requires established guidelines; for activity engaged in on an individual basis, requires guidelines developed in collaboration with a physician expert in the nurse's area of practice, and approved by the boards of medicine and nursing.

Mississippi. Regulations require that the nurse work under the direct supervision of a physician pursuant to an approved protocol.

Nebraska. Collaboration required but not specified in summary material received.

New Mexico. NP shall act only under the supervision of a licensed physician or surgeon.

North Carolina. Application of NP for approval must be signed by supervising physician and contain written certification of extent and nature of supervision and tasks to be performed.

Oklahoma. Requires that therapeutic regimen be within established protocols.

Pennsylvania. Acts must be performed in collaboration with, and under the direction, of a licensed physician. Physician must be available immediately through communications and available on a regularly scheduled basis for referrals, review of medical practice incorporating consultation and chart review, establishing and updating standing orders, drug and other medical protocols, periodic updating in medical diagnosis and therapeutics, and cosigning records when necessary.

South Carolina. Acts to be authorized must be jointly approved by nursing board and physician consultants. Extended role must be performed under the direction and supervision of a licensed physician who shall be in proximity and readily available for consultation. Must function within approved written protocols.

South Dakota. Requires a written and approved practice agreement naming physicians responsible for supervision and describing medical functions authorized. Must be signed by physician and filed with boards. Supervision may be direct or indirect.

Utah. Allows NPs to initiate medical drug therapeutics authorized by jointly developed written protocols and/or standing orders of a licensed physician.

Virginia. Must act under the supervision and direction of a licensed physician who must be readily available for consultation and who is ultimately responsible for directing the specific course of medical treatment. Must have a written protocol defining the steps to be taken and the delegated medical acts to be performed in the care and management of patients/clients.

Prescription-writing authority

Alaska. No Class I or II drugs. Prescription must include collaborating physician's name and Drug Enforcement Administration (DEA) number.

Arkansas. No prescription writing authority.

Florida. When and if permitted by a joint committee of boards of medicine and nursing (no such authorization at present).

Idaho. Must apply for prescription-writing authority; limited formulary; no controlled substances; prescription must include name and address of supervising physician; physician must review prescriptions on a regular basis.

Indiana. No prescription-writing authority indicated.

Maryland. Regulations allow prescriptions, but the statute does not.

Massachusetts. No prescription-writing authority indicated.

Mississippi. Controlled by written protocol.

Nebraska. No prescription-writing authority indicated.

New Mexico. No prescription-writing authority indicated.

North Carolina. Board of Medical Examiners and Board of Nursing regulations governing the approval of individual NPs to write prescriptions with such limitations as determined by the boards. Must have written instructions from supervising physician about indications and counterindications. Also limited by approved formulary; cannot prescribe controlled substances.

Oklahoma. No prescription-writing authority indicated.

Pennsylvania. Allows for prescription-writing in accordance with established protocols.

South Carolina. No prescription-writing authority indicated.

South Dakota. Prescription of medications for treatment of causative factors and symptoms in accordance with the "practice agreement."

Utah. May initiate drug therapies as authorized by jointly developed written protocols and/or standing orders of a licensed physician. Special pilot project created in 1979 to allow administration of local anesthetics and prescription of drugs or medicines in accordance with protocols approved by a special committee of three physicians, three nurses, and one pharmacist.

Virginia. No prescription-writing authority indicated.

Joint authority

Alaska. Requires submission of plan of collaboration to the State medical board for approval.

Arizona. None.

Arkansas. None.

Florida. Acts to be performed by NPs must be identified and approved by a joint committee of the boards of medicine and nursing.

Idaho. NP seeking initial approval shall be interviewed along with the supervising physician by a committee of the boards of medicine and nursing. Regulations jointly adopted by Board of Medicine and Board of Nursing.

Indiana. NP may perform medical acts as approved by the Board of Nursing and the Medical Licensing Board.

Kentucky. Nurses must conform to the standards of the Medical Practice Act. The Board of Medical Licensure has proposed regulations to govern acts that would normally be construed as the practice of medicine.

Maryland. Regulations jointly promulgated by Board of Medical Examiners and Board of Examiners of Nurses.

Massachusetts. NP may perform additional acts as approved by the boards of medicine and nursing. Regulations promulgated jointly.

Mississippi. Boards of medicine and nursing must jointly approve regulations governing expanded practice.

Nebraska. Advisory council composed of nurses and physicians to review certification requirements. NP must be certified by the Health Department with the approval of the boards of medicine and nursing.

New Hampshire. Regulations jointly approved by boards of medicine and nursing governing acts to be performed by NPs.

New Mexico. None.

North Carolina. NP course must be approved by Board of Medical Examiners. NP must be approved by board. Regulations jointly prepared by Board of Medical Examiners and Board of Nursing.

Oklahoma. None.

Pennsylvania. Regulations promulgated by State Board of Medical Education and Licensure and Board of Nursing Examiners.

South Carolina. Acts to be performed by NPs determined jointly by physician consultants to the Board of Nursing and the Board. Statements to define education and training and functions which specify additional acts to be performed.

South Dakota. Practice of NP subject to joint control and regulation of Board of Nursing and Board of Medical and Osteopathic Examiners.

Utah. None.

Vermont. Additional acts may be performed by NP when jointly recognized by medical and nursing professions as proper to be performed by nurses.

Virginia. Services authorized by rules and regulations jointly promulgated by Board of Medicine and Board of Nursing.

Georgia. None.

Nevada. Member of Board of Medical Examiners must be present at meeting of Board of Nursing at which NP applicant appears to assist with evaluation of the clinical competence of the applicant with respect to the medical services to be performed. Medical board member empowered to determine extent to which NP may possess, dispense, or administer drugs.

No NP provisions

Connecticut, Delaware, Illinois, and New Jersey have no NP provisions.

Iowa. Proposed Rules and Regulations are now in discussion stage.

Missouri. Law limited to nursing diagnosis and nursing care.

New York. Bill is currently under consideration.

North Dakota. May train to become Physician's Assistants.

Vermont. Regulations are being developed.

Medical Directory Errata

These corrections are set in a matching format to be inserted into your MEDICAL DIRECTORY OF NEW YORK STATE

Corrections of editorial errors in biographic material in the *Medical Directory of New York State* Volume LVIII 1982–83 are listed below.

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Electrocardiograms of the Month

Montefiore Hospital and Medical Center
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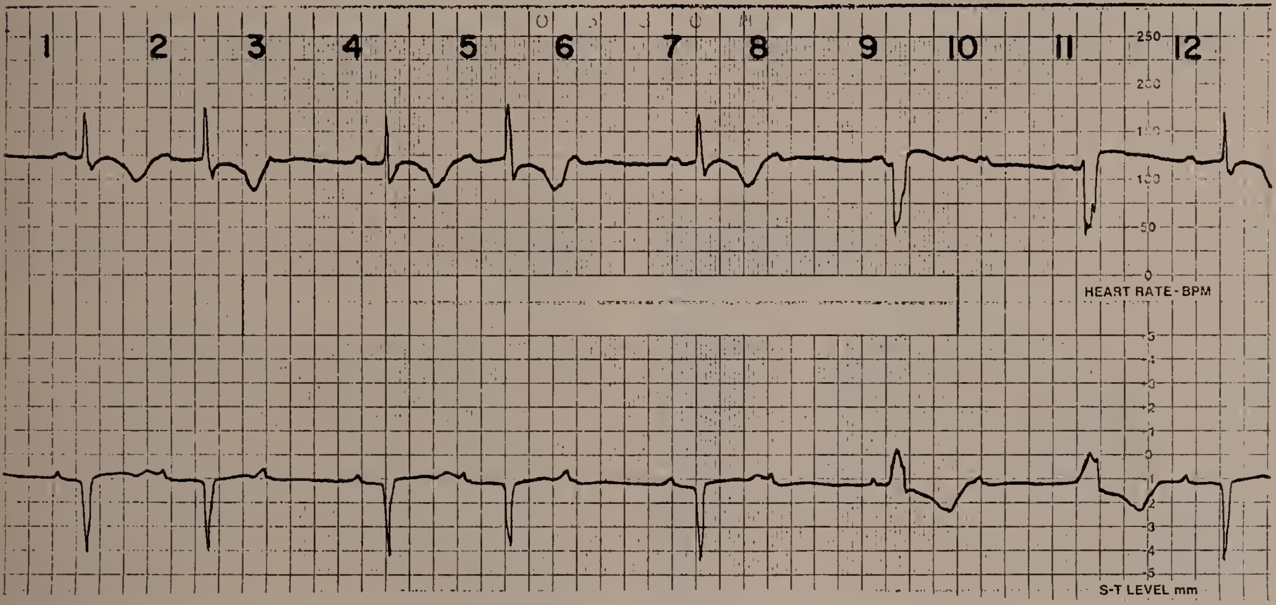
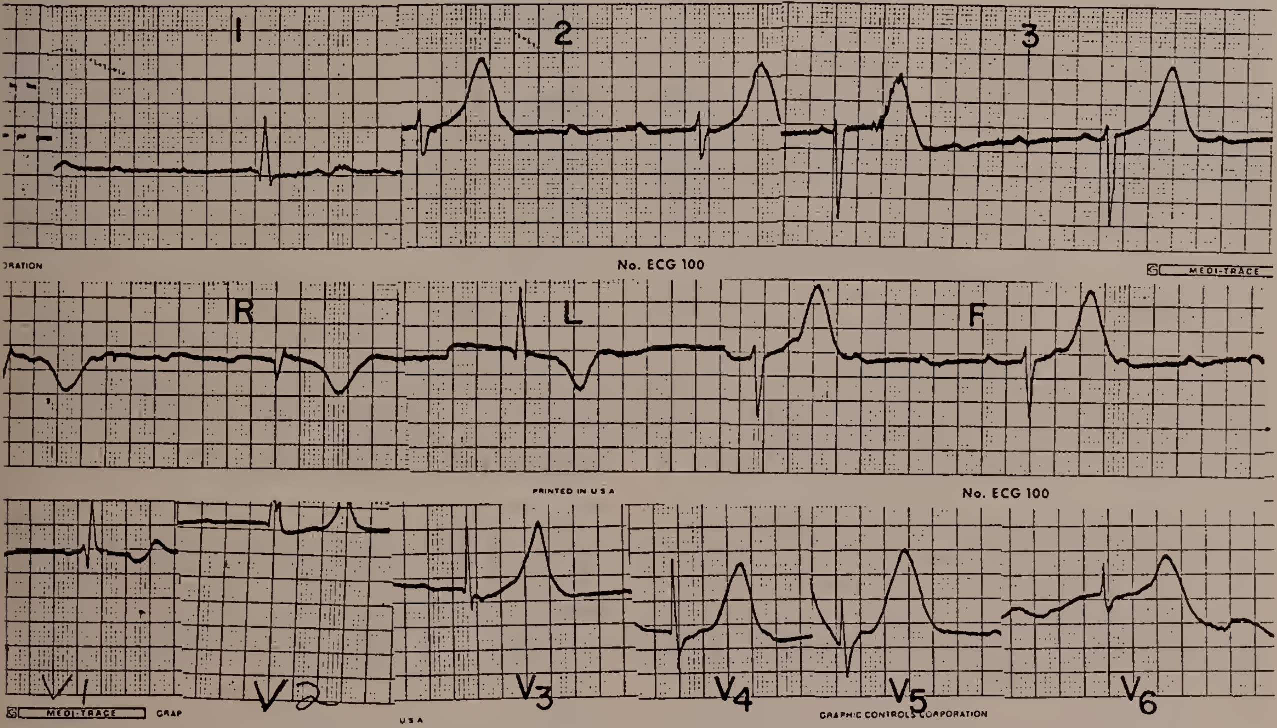


QUESTION 353. Simultaneous leads from a Holter monitor recording. What is the interpretation?



QUESTION 354. This is the initial electrocardiogram of a 77-year-old women who was admitted with syncope. She complained of weakness and dizziness. What is the interpretation?

Electrocardiograms of the Month

ELUCIDATION

Answer 353. P waves are regular at a rate of 78/min. The QRS measures 0.12 sec, indicating intraventricular conduction delay. The PR interval varies; the first is 0.20 sec, the second 0.38 sec, and the third P wave is blocked; the first six P waves are conducted with Wenckebach periodicity with 3:2 A-V block. The seventh P wave is conducted. The eighth P wave is blocked (2:1 block).

The 9th, 10th, and 11th P waves are not conducted. Ventricular escape beats with a duration of 0.16 are present. The 12th P wave captures the ventricle.

Answer 354. The atrial rhythm is sinus tachycardia at a rate of 110/min. The PR interval varies.

The ventricular rate is regular at a rate of 27/min. The QRS measures 0.12 sec in duration. The T waves are very large and broad; the QT interval is 0.76 sec. The patient is in complete heart block with a slow idioventricular pacemaker at a rate of 27/min. Syncope is frequently seen in patients with marked bradycardia, especially in older age groups. The giant broad T waves may be seen in patients with recent or impending Adam-Stokes syndrome, usually due to ventricular fibrillation.

A pacemaker was inserted, completely abolishing all symptoms.

Ambulatory Dialysis

Many patients with kidney failure can be freed of using home or hospital dialysis machines through an alternative that treats their condition while allowing them the mobility to lead normal, economically productive lives.

According to a report by the American Medical Association Council on Scientific Affairs, continuous ambulatory peritoneal dialysis (CAPD) can enable selected patients with end-stage kidney disease to manage their own treatment independently by using a dialysis system worn under clothing.

The CAPD user instills two liters of dialysate liquid into his peritoneum (abdominal cavity) through a catheter that is permanently implanted in his abdominal wall. After instillation, the plastic bag that contained the dialysate is rolled up — still attached to the catheter — and carried in a cloth waist purse under the clothing. The dialysate remains in the abdominal cavity for four to six hours, during which normal body wastes diffuse into it from capillary blood vessels in the membrane lining the abdominal cavity. After the diffusion period, the dialysate is drained back into the bag, which is then discarded; a new bag of dialysate is attached to the catheter and fresh liquid is instilled. The patient exchanges dialysate four or five times a day, seven days a week.

The process offers its users — 4,000 in the United States and 6,000 in other countries — distinct advantages over intermittent machine dialysis. By helping to maintain stable body weight, blood pressure and blood chemistry, CAPD helps patients avoid the sick feeling that can accompany machine dialysis. Diabetic patients can add insulin to the dialysate, eliminating the need for daily injections.

Use of permanent catheters and improved delivery systems have reduced the number of cases of peritonitis, which has been a complication of peritoneal dialysis since its introduction 30 years ago.

The greatest advantage CAPD offers, is the overall improvement in the quality of the patient's life through self-management and fredom from the dialysis machine. Such freedom also has economic benefits. CAPD can reduce the annual cost of dialysis from $30,000 and $18,000 for hospital and home dialysis, respectively, to about $15,000. The reduction in cost could have a significant effect on federal health care expenditures. In 1980, the federal government devoted nearly $1.2 billion of its Medicare budget to the 55,000 patients who qualified for payment under the End-Stage Renal Disease Program. Since the program's inception in 1973, both costs and recipients have dramatically increased. Now more than 5% of the total budget is being spent on machine dialysis and kidney transplants for 0.2% of the active Medicare patient population, says the report.

Yet, despite advantages, CAPD has drawbacks. Peritonitis, though limited, still strikes in an estimated 0.5% to 1% of all treatments administered. Obesity can result from the intake of a high concentration of glucose in the dialysate. Tissue damage may develop in and around the catheter opening. Some patients may find it difficult or inconvenient to administer the dialysate using sterile techniques and to make the necessary four to five daily bag changes.

The Council recommends that potential CAPD patients be carefully screened and that the procedure be limited to intelligent, highly motivated patients.

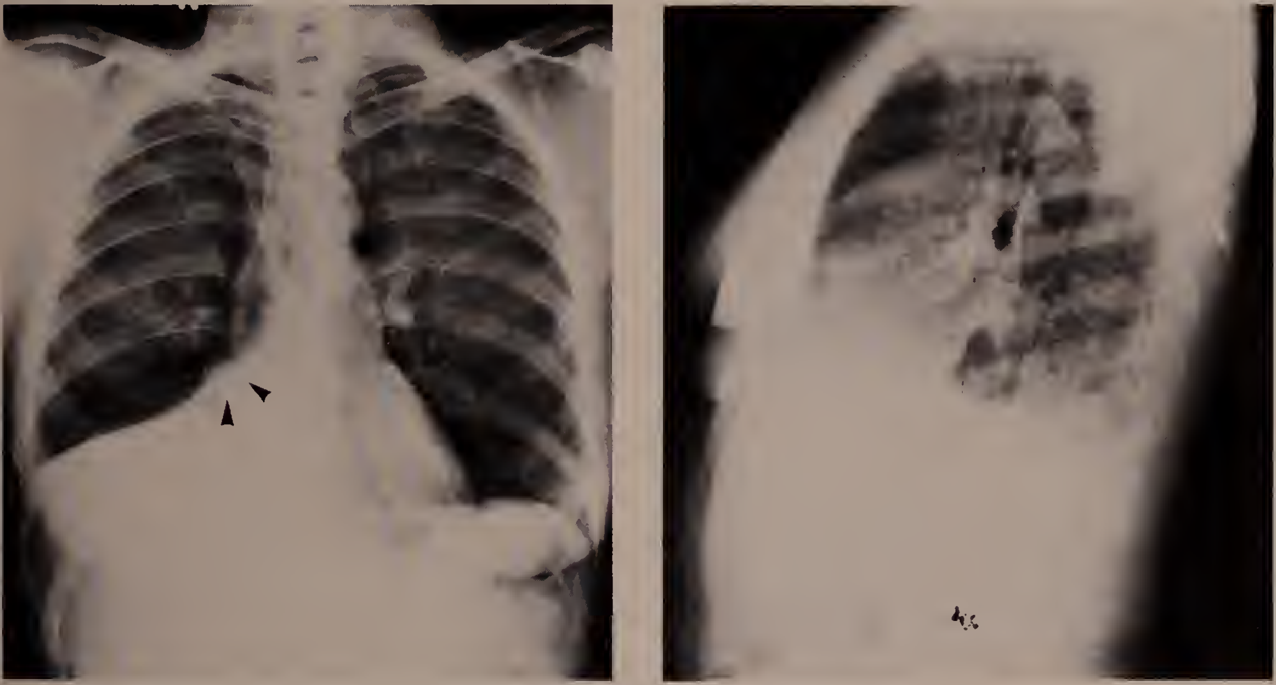
Radiologic Problem of the Month

Montefiore Hospital and Medical Center
The Bronx, New York

Editor

KAKARLA SUBBARAO, M.D.
Professor of Radiology at
Albert Einstein College of Medicine

Triangular Opacity Right Lower Hemithorax



A 42-year-old woman complained of recent hemoptysis and cough of two months' duration.

Elucidation

The posteroanterior radiograph of the chest (Fig, left) reveals a triangular opacity in the lower part of the right hemithorax extending from the right hilum to the costophrenic angle. The right dome of the diaphragm is not delineated. The right hemithorax is small compared with the left; the trachea is pulled to the right side and the right hilum is tucked down. All these findings point to atelectasis of the right middle and lower lobes; middle lobe because the right cardiac border is obscured, and the lower lobe because the right dome of the diaphragm lacks definition. On close inspection, a rounded opacity with a bump projecting up (arrowheads) is noted at the apex of the triangular density, producing atelectasis. Lateral view of the chest (Fig, right) confirms the diagnosis of atelectasis of the middle and lower lobes on the right side. Note that the density of the lower thoracic vertebrae is increased (the reverse of normal increase of lucency), indicating that the collapsed lower lobe overlies the lower thoracic vertebrae. In the differential diagnosis, pleural effusion at the right base may be thought of, but a contracted hemithorax rules out a space-occupying mass or effusion. The mass in the apex of the atelectatic triangle may represent an adenoma. Carcinoma is less likely in this young woman and is less often associated with hemoptysis. Thromboembolism and tuberculosis as causes of atelectasis do not merit any consideration.

Bronchial adenomas are benign lesions with considerable malignant potential. They represent about one half of all benign neoplasms of the lung.[1-3] Approximately 80% of them histologically resemble the carcinoid tumors of the intestine, while the remainder are related to the cylindromas of the upper air passages. Bronchial adenomas are slightly more prevalent in women in the age group of 40 to 50 years. The clinical symptoms vary, but hemoptysis is a helpful clue to the diagnosis of bronchial adenoma. Bronchoscopy and biopsy constitute the most effective means of identifying endobronchial adenomas. Presence of symptoms of Cushing's syndrome indicates carcinoid type of adenoma.

Pathologically, the presence of neurosecretory granules in both bronchial carcinoid and oat cell carcinoma has led to the idea that both these tumors take origin from Kulchitsky's cells.[1]

Radiologically, adenomas of the bronchus appear as a mass in the hilum or, rarely, as a coin lesion at the periphery. It is common to encounter a collapsed lobe from an endobronchial adenoma. Occasionally, the adenomas result in pneumonia, abscess, bronchiectasis, or obstructive emphysema.[3] Calcification in bronchial adenoma is rare. Endobronchial adenoma may grow out of the bronchus, appearing iceberg-fashion (Fig, left). Tomography and bronchography help in outlining the adenoma. The presence of osteoblastic metastasis indicates the adenoma to be of carcinoid type. In this particular instance, the tumor was carcinoid, located in the intermediate bronchus, and growing out, producing atelectasis of both right middle and lower lobes.

Diagnosis

Bronchial carcinoid, producing atelectasis of the right middle and lower lobes

References

1. Pantoja E, Cross VF, Kunchala S, et al: Bronchial adenomas: clinicoradiologic profile. *New York State J Med* 1978; 78:1451–1455.
2. Proto AV, Tocino I: Radiographic manifestations of lobar collapse. *Semin Roentgenol* 1980; S15:117–123.
3. *Chest Disease (Third Series) Syllabus*, Case 16. Chicago, American College of Radiology, 1981, pp 213–229.

ADA warns of excess soft drink consumption

As refreshing as tall, cool drinks may be when the mercury climbs, consumption of milk should not be put on hold during the summer months.

For some people, soft drinks and hot weather go together like baseball and hot dogs, but there is a disadvantage in replacing milk with carbonated cool ones at the dinner table.

Soft drinks contain an essential nutrient called phosphorus. But too much of a good thing could be bad because another essential mineral, calcium, can be depleted by a build-up of phosphorus. By substituting soft drinks for milk, the calcium balance could be thrown off kilter, affecting bone strength, say researchers in a report recently published in the *Journal of The American Dietetic Association* (ADA).

When soft drink consumption is excessive, phosphorus can deplete the storage of calcium in the bones. Over time, the loss of such bone minerals can result in osteoporosis, a softening of the bones which frequently leads to fractures, especially among postmenopausal women. It can also shrink jaw bones, leading to tooth loss or poorly fitting dentures, research indicates.

In a study at Washington State University in Pullman, Linda K. Massey, Ph.D., R.D., and Mary M. Strang tested 13 different soft drinks. All the colas and powdered drink mixes contained phosphorus, while root beers, noncolas, and fruit flavored carbonated beverages contained little or no phosphorus.

Ice water and fruit juices can be just as refreshing as soft drinks, say dietitians. But if cola-type drinks or beverages made from powders are part of one's daily routine, make sure that intake of foods with calcium is ample, the nutrition experts advise. Top sources of calcium include milk, cheese, enriched or whole grain breads, and a few fruits and vegetables.

Chronic Hemoptysis Secondary to Infected Left Ventricular Pseudoaneurysm

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Aneurysms of the left ventricle are recognized complications of myocardial infarction, and ventricular aneurysmectomy has become a common cardiac surgical procedure usually accompanied by coronary artery bypass surgery. Repair is accomplished by resection or plication, and Teflon felt pledgets are often used to buttress the suture line. These Teflon pledgets have been implicated as the focus of indolent infection resulting in delayed ventricular rupture and pseudoaneurysm formation. Six cases of infected left ventricular pseudoaneurysm have been reported previously. However, in only one of these cases was massive hemoptysis described.[1] In the case we report here the major presenting feature was recurrent, progressive hemoptysis of six months' duration that eventually became life threatening.

Case report

A 57-year-old white male smoker had a ventricular aneursymectomy and double aortocoronary bypass surgery in May 1979. The immediate postoperative course was unremarkable, but one and one-half years later he had the gradual onset of low-grade fever and intermittent hemoptysis. Chest x-ray films at that time revealed an aneurysmal bulge of the left ventricle and a hazy infiltrate along the left border of the heart (Fig 1). He was treated with a variety of antibiotics for several months for presumed bronchiectasis without improvement. Bronchoscopy showed a small amount of blood coming from the left upper lobe but no endobronchial lesions were noted. Results of sputum cytologic studies were negative for malignant cells and cultures were unremarkable. A bronchogram showed poor filling of the lingular segment but was otherwise negative (Fig 2). Pulmonary angiogram was normal. Cardiac catheterization performed in May 1981 showed that both coronary grafts were patent, but the ventriculogram demonstrated a large pseudoaneurysm of the left ventricle (Fig 3). Several days after cardiac catheterization the patient expectorated 300 to 400 cc of bright red blood and then spontaneously stopped bleeding. Shortly thereafter he underwent thoracotomy, and with the aid of cardiopulmonary bypass the pseudoaneurysm was excised along with adjacent necrotic and infected lung tissue (Fig 4). The patient was given cefamandole nafate preoperatively, but antibiotic therapy was switched to oxacillin and continued for ten days when cultures of the pseudoaneurysm and suture line grew only *Staphylococcus epidermidis* sensitive to oxacillin. The rest of his hospital course was unremarkable and he was discharged on the tenth day after surgery in good condition. He has had no recurrence of hemoptysis or fever.

Comment

Six other cases of infected ventricular pseudoaneurysm have been previously reported.[1-4] In all of these cases the Teflon buttresses used in the repair of the aneurysm were implicated as the nidus of infection. In only one of these cases was hemop-

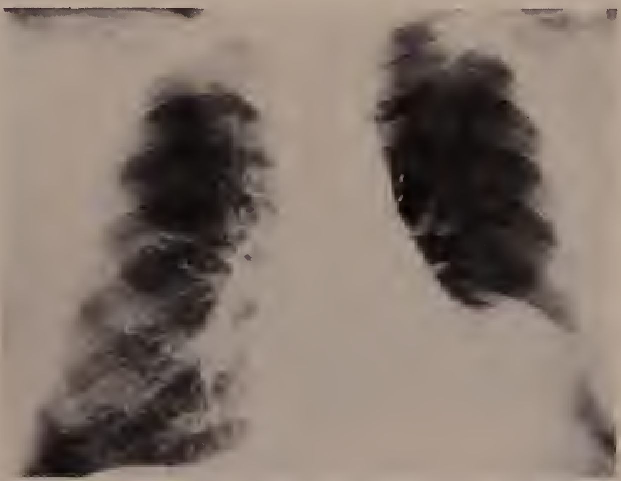

FIGURE 1. Chest x-ray film demonstrating aneurysmal bulge of left ventricle with infiltrate along left border of heart.

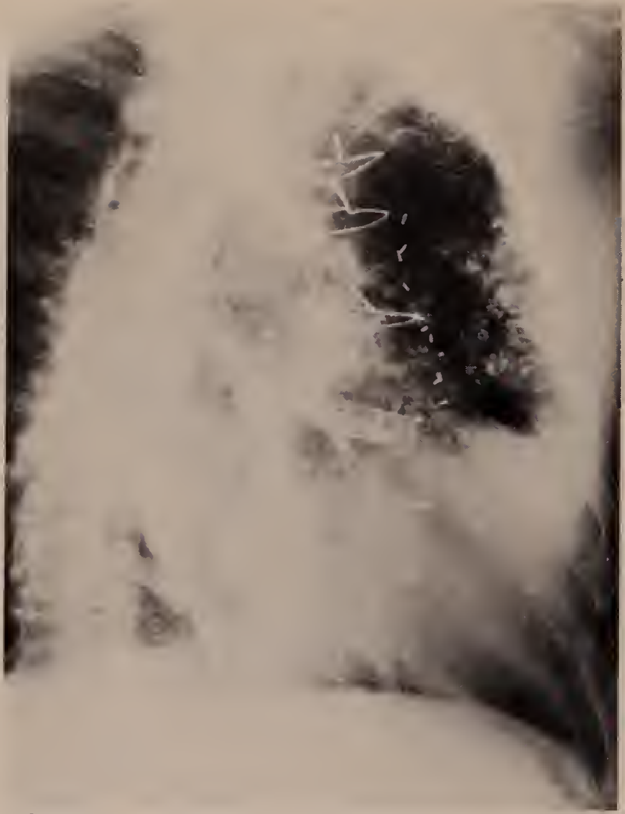

FIGURE 2. Bronchogram demonstrating poor filling of lingular segment.

tysis a significant feature as it was in our patient.[1] In all cases the onset of symptoms was delayed from several weeks to as long as three years. The organisms involved were *Staphylococcus aureus* in two cases, *Candida albicans* in one case, *Staphylococcus epidermidis* in one case, and *Enterobacter cloacae* in another. There was no culture reported on the pseudoaneurysm material from the sixth case. The material cultured from our patient grew only *Staphylococcus epidermidis*.

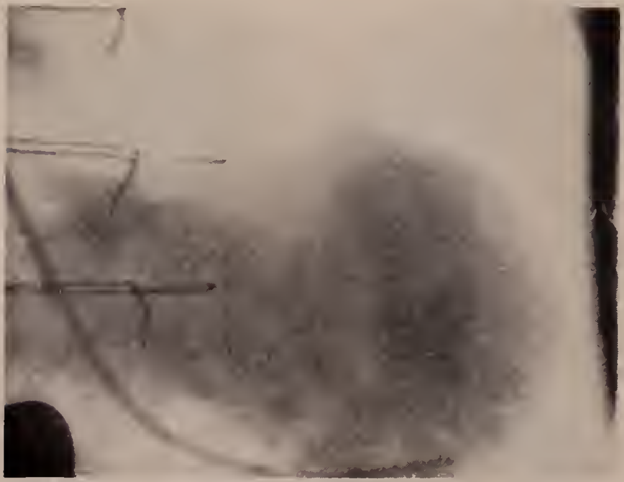

FIGURE 3. Ventriculogram demonstrating pseudoaneurysm of left ventricle.

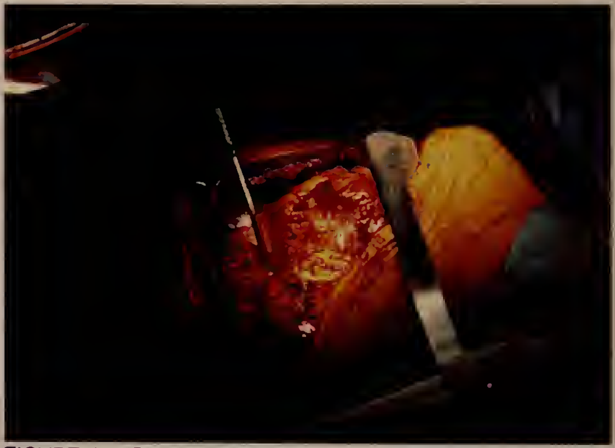

FIGURE 4. Pseudoaneurysm of left ventricle as seen at time of operation.

The source of the infection in these patients is not clear. In one patient the Teflon pledgets apparently become infected after the patient developed an empyema following coronary artery bypass surgery leading to the subsequent formation of an infected pseudoaneurysm.[4] Another patient had left lower lobe pneumonia and recurrent sepsis.[2] A third had a ventriculocutaneous fistula.[2] A fourth had mediastinitis and soon thereafter developed an infected pseudoaneurysm.[3]

In our case and in the case reported by Mills and his coworkers,[1] the source of infection is less clear. When myocardial infarction and necrosis occur resulting in an aneurysm, the pericardium may become involved, forming a pseudoaneurysm. When the aneurysm is then resected during repair, part of the pericardium may be removed as well. As a result, there may not be enough pericardial covering over the Teflon buttresses. It has been speculated that the felt buttresses may slowly erode into and compress the adjacent lung segments resulting in partial bronchial obstruction, bronchiectasis, and massive hemoptysis as in our patient.[1] Because of anatomic proximity the lingula segment is most likely to be involved. The suture line may subsequently become infected leading to dehiscence and the development of another aneurysm. This second aneurysm may have the characteristics of a pseudoaneurysm with a small orifice connecting it with the ventricle but without any pericardial involvement.

Our case and the others previously described emphasize the fact that pulmonary problems such as recurrent hemoptysis, bronchiectasis, and pneumonia may be the only clinical indications of an infected left ventricular pseudoaneurysm. Preservation of the pericardium during the initial aneurysmectomy, if possible, might protect the buttress line and help prevent the sequence of events described. Management of the problem once it has occurred consists of removal of the pseudoaneurysm and any infected or bronchiectatic adjacent lung tissue along with appropriate antibiotic therapy. The recognition of this complication of ventricular aneurysmectomy is particularly important at this time because of the increasing frequency of this type of surgery and the often insidious nature of the symptoms.

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Genetically engineered interferon shows antitumor activity

In the first trial to assess the effects of different doses of genetically engineered interferon, researchers found evidence of tumor regression in a variety of cancers according to a National Cancer Institute study in the *Journal of the American Medical Association.*

This trial and others have paved the way for more definitive tests on the anticancer potential of interferon that are in progress.

According to the current *JAMA* report, the biosynthetic interferon had anticancer activity in patients with non-Hodgkin's lymphoma breast cancer, chronic lymphocytic leukemia, Hodgkin's disease and melanoma. The remissions lasted from three to seven months, writes Stephen A. Sherwin, M.D., primary author of the NCI report.

A major part of the study — to assess the safety of the interferon — left researchers confident that the biosynthetic interferon not only works, but that it produces side effects no more difficult to handle than those which have been reported for natural interferon.

Recombinant DNA techniques have ensured that enough interferon can be produced to investigate all of its therapeutic uses.

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acetaminophen, 300 mg and codeine phosphate*, 30 mg (½ gr)
acetaminophen, 300 mg and codeine phosphate*, 60 mg (1 gr)
*WARNING: May be habit forming.

Please see adjacent page for brief summary of prescribing information.

(*continued from page 12*)

$150,000 contribution

The Bristol-Myers Company today announced a contribution of $150,000 in support of the American Medical Association's Patient Medication Instruction (PMI) program. Initially, the PMI Program will consist of instruction sheets for 20 commonly prescribed drugs. These sheets, which will identify the drug by generic name, will be designed for physicians to give to patients when explaining the drug. The sheets will also include space to write in the patient's name, specify a brand name, note special instructions, and indicate dosage, frequency and method of administration. Next year the AMA will prepare sheets for 40 more drugs, with another 40 due in 1984. An existing PMI will be updated if new information about a drug becomes available.

Control Data opens Staywell Center

Control Data Corporation's new Chicago Staywell Center was officially opened today by U.S. Secretary of Health and Human Services Richard S. Schweiker at a ribbon-cutting ceremony in the Chicago Marriott Hotel.

The center, operated by Control Data's Life Extension Institute division, is the second to open in the United States. A New York center was launched last February. The Chicago facility is the largest tenant in the Marriott's newlyremodeled third floor mezzanine.

Schweiker called the Staywell Center "a major effort by the private sector to contain health care costs through health assessment, promotion, and education. Preventing illness before it strikes can be the single most effective tool that we have for keeping our health bills down and enhancing the years of our lives," Schweiker said.

The center will offer a wide range of preventive medicine and health programs for employees of Chicago-area businesses and for the general public. Programs include computer-aided health risk assessment, wellness courses and behavior change counseling, along with traditional physical examinations.

Staywell Center activities are based on the evidence that lifestyle and behavior have a major impact on health and that poor health habits contribute to the prevalence today of disease, cancer, strokes and other chronic illnesses.

The Chicago center is staffed by Life Extension Institute physicians, technicians and health educators and is equipped with extensive clinical facilities for medical examination and testing.

Wellness counselors, working with the medical staff, help participants develop plans for controlling weight, managing stress, stopping smoking and becoming physically fit. Consulting health specialists provide wellness education, individual counseling and lifestyle change courses.

David F. Henault, vice president of Control Data's healthcare services group, called the Staywell Center "part of a long term effort by Control Data to help U.S. business address the serious problem of soaring employee health care costs, which have more than doubled in six years, from $24.6 billion in 1975 to $55 billion in 1981."

Henault said that the center also will offer occupational health services and a counseling program to help employees solve personal and work-related problems.

(*continued on page 102*)

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Precautions: *Head injury and increased intracranial pressure:* The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a preexisting increase in intracranial pressure. Narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.
Acute abdominal conditions: Codeine or other narcotics may obscure the diagnosis or clinical course in patients with acute abdominal conditions.
Special risk patients: Administer with caution to certain patients such as the elderly or debilitated, and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, and prostatic hypertrophy or urethral stricture.
Information for Patients: Codeine may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery. The patient taking this drug should be cautioned accordingly.
Drug-Interactions: Patients receiving other narcotic analgesics, antipsychotics, antianxiety, or other CNS depressants (including alcohol) concomitantly with acetaminophen and codeine may exhibit additive CNS depression due to the codeine component. When such therapy is contemplated, the dose of one or both agents should be reduced.
The use of MAO inhibitors or tricyclic antidepressants with codeine preparations may increase the effect of either the antidepressant or codeine.
The concurrent use of anticholinergics with codeine may produce paralytic ileus.
Usage in Pregnancy: Safe use in pregnancy has not been established relative to possible adverse effects on fetal development. Therefore, acetaminophen and codeine should not be used in pregnant women unless, in the judgment of the physician, the potential benefits outweigh the possible hazards.
Nursing Mothers: It is not known whether the components of this drug are excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when acetaminophen and codeine are administered to a nursing woman.
Adverse Reactions: Most frequently: Lightheadedness, dizziness, sedation, shortness of breath, nausea and vomiting. More prominent in ambulatory than in nonambulatory patients, and some of these adverse reactions may be alleviated if the patient lies down. Others: Euphoria, dysphoria, constipation and pruritus.
Dosage and Administration: Dosage should be adjusted according to severity of pain and response of the patient. However, it should be kept in mind that tolerance to codeine can develop with continued use and that the incidence of untoward effects is dose related. This product is inappropriate even in high doses for severe or intractable pain. Adult doses of codeine higher than 60 mg fail to give commensurate relief of pain but merely prolong analgesia and are associated with an appreciably increased incidence of undesirable side effects. Equivalently high doses in children would have similar effects.
Adults: **Codeine**—15-30 mg (for mild to moderate pain)
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Coccidioidal Meningitis in Rural Pennsylvania

TEDD M. GOLDFINGER, D.O.
DAVID R. GUTKNECHT, M.D.
Danville, Pennsylvania

From the Department of Internal Medicine, Geisinger Medical Center, Danville

Recognition of disseminated coccidioidomycosis outside its endemic distribution in the Lower Sonoran life zone of the southwestern United States and northern Mexico has rarely been reported in the literature. Several authors have stressed, however, that with the increasing frequency of transcontinental and international travel, this disease may well be seen where it is unexpected, in persons who have had limited exposure in an endemic area.[1,2] We report a previously healthy Pennsylvanian who acquired disseminated coccidioidomycosis and meningitis during an annual visit to southern Arizona.

Case report

A 70-year-old white male, a retired bank executive, was admitted to Geisinger Medical Center complaining of severe bitemporal headache of three weeks' duration. There was associated dizziness, nausea, and scanty emesis. Fever, vision disturbance, change in intellect, drowsiness, and symptoms of focal neurologic dysfunction were denied. He had episodes of protracted nausea and emesis with anorexia and a concomitant 8-lb weight loss. Six months prior to admission, he had suffered a transient febrile illness while on vacation in southern Arizona. No specific diagnostic studies were done and he was given oral antibiotics and decongestants. His symptoms resolved gradually over one month. He had been otherwise in good health, with no history of diabetes, alcohol abuse, chronic illness, or use of immunosuppressant medication.

On admission, he was alert and without distress. He was afebrile with a normal pulse and blood pressure. General examination showed no evidence of head trauma. Pupils were equal and reacted to light, and fundi were normal without papilledema. Paranasal sinuses were nontender with good transillumination. Neck revealed limited range of motion in flexion, extension, side bending, and lateral rotation without pain. Neurologic examination revealed symmetric deep tendon reflexes, bilateral plantar flexor response, and a slight ataxic gait. Speech appeared to be somewhat slow and cognitive ability depressed. A pilonidal dimple was the only other abnormal finding.

Peripheral white blood cell count was 7,300/cu mm with 74% segmented neutrophils, 18% lymphocytes, 7% monocytes, and 1% eosinophils. Erythrocyte sedimentation rate was 3 mm/hr. Serum VDRL was nonreactive. All other "routine" laboratory studies were normal. Serum was submitted for serologic studies. Intermediate-strength PPD was negative. Electrocardiogram suggested an old anteroseptal myocardial infarction. Chest roentgenogram, as well as sinus, cervical, and lumbosacral spine roentgenograms, was normal.

Computerized tomography of the brain showed symmetric dilatation of the lateral ventricles and enlargement of the third ventricle (Fig 1). Lumbar cerebrospinal fluid (CSF) obtained on hospital days 1, 6, and 22 demonstrated findings consistent with a syndrome of chronic meningitis (Fig 2). Gram stain, India ink preparation, and Ziehl-Neelson staining of the CSF failed to reveal bacteria, fungi, or acid-fast bacilli, respectively. CSF cultures were negative. VDRL and cryptococcal antigen screening were negative. Serum and CSF antibody titers for histoplasmosis, blastomycosis, and cryptococcosis were all insignificant at less than 1:2. Serum complement-fixation titers for *Coccidioides immitis* was positive at 1:16 dilution, suggesting disseminated coccidioidomycosis. CSF complement fixation titer to *C immitis* was 1:32, confirming coccidioidal meningitis.

Intravenous amphotericin B chemotherapy was initiated. The patient was transferred to the University of Arizona Health Sciences Center for treatment to include intrathecal as well as intravenous amphotericin B.

Discussion

Coccidioidomycosis is rare outside its endemic area. Few cases are cited as optionally reported diseases of interest from nonendemic states annually. The US Public Health Service listed 17 such cases in its annual report of 1980.[3] The authors are aware of only four other cases cited in Pennsylvania since 1974. Perhaps more cases would be known if reporting were mandatory. Even more might be recognized if physicians appreciated the mobility of today's populace and the fact that even brief exposure in an endemic area can result in coccidioidal infection. It is estimated that in the endemic states, 10% to 15% of newly arrived residents contract the infection within the first year, and 90% do so within ten years.[4] Coccidioidomycosis may be excluded in persons who have neither visited nor resided in the endemic states, although rare spread by fomites has been reported.[4]

Coccidioidomycosis is acquired via the respiratory tract by the inhalation of dust-borne arthrospores. Human-to-human transmission does not occur. The infecting organism, *C immitis*, is a saprophytic dimorphic fungus that resides in the soil of certain arid to semiarid climates. Humans are accidental hosts

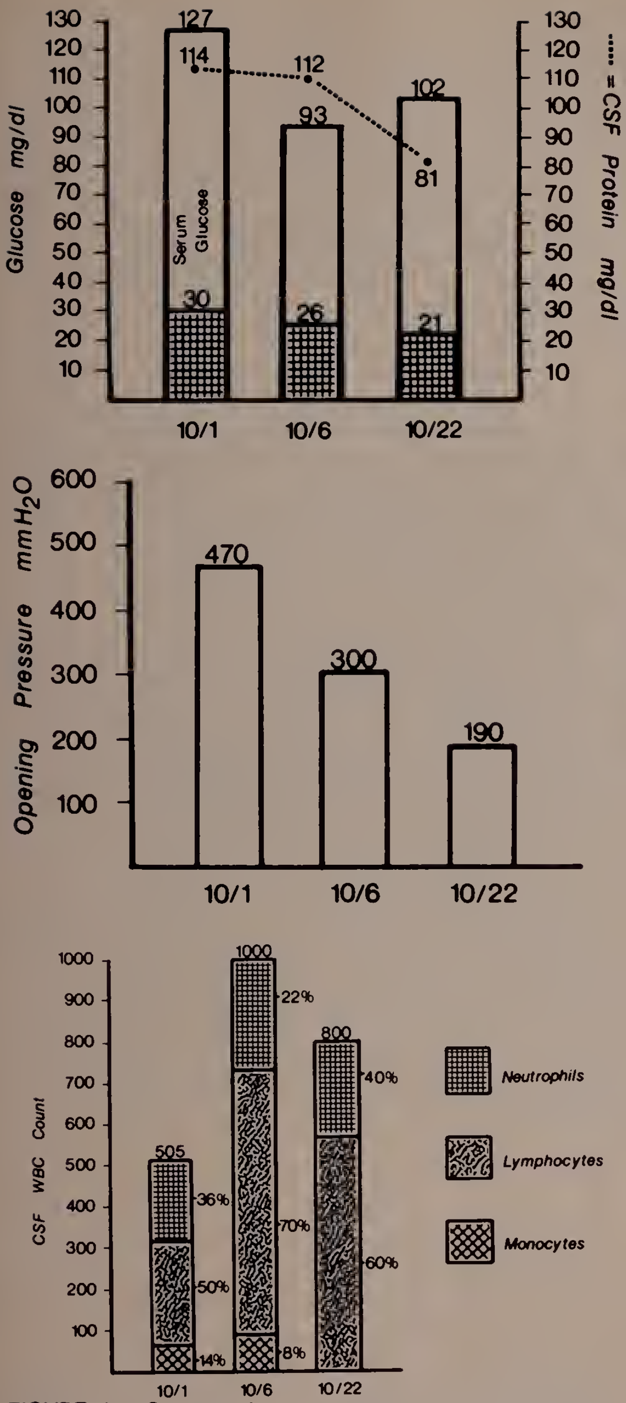

FIGURE 1. Computerized tomogram of the brain shows hydrocephalus with symmetric dilatation of the lateral ventricles and enlargement of the third ventricle.

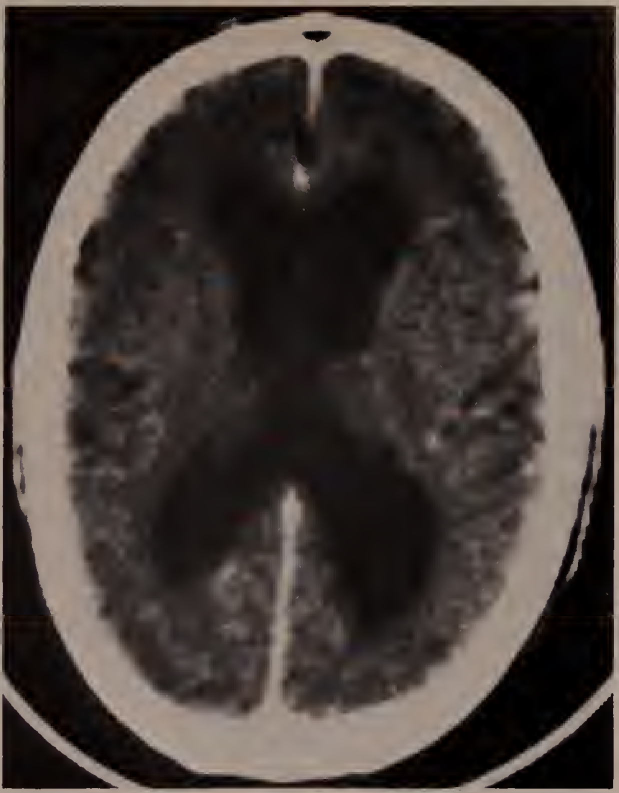

FIGURE 2. Serial samples of lumbar CSF demonstrate: (top) depressed CSF glucose compared with simultaneously drawn serum glucose, and elevated CSF protein, on all three occasions; (middle) elevated opening pressure with a progressive decline over hospital course; and (bottom) CSF pleocytosis with lymphocyte predominance on all samples.

and are not necessary for the perpetuation of the microorganism in nature. Microepidemics have been reported at archaeologic digs and at the site of earth-moving projects within the endemic areas.[5]

Sixty percent of coccidioidomycosis is acquired asymptomatically without morbid manifestations.[6] Skin-test conversion is the only objective sign of infection. The remaining symptomatic population may represent a clinical syndrome so mild as to suggest only a transient viral syndrome. Frank pneumonia, with pleural effusions and toxic erythema, represents a less common presentation of primary pulmonary coccidioidomycosis.[6] Although the incidence of disseminated coccidioidomycosis is four to ten times higher in the nonwhite races, dissemination of coccidioidomycosis is uniformly rare (less than 1%).[7] Smith studied healthy white military recruits stationed at four air bases in California and Arizona during World War II. Eight of 710 (1.1%) patients with symptomatic coccidioidomycosis developed disseminated disease. These eight patients constitute 0.26% of total estimated infected population.[6]

Meningitis occurs in 30% to 50% of disseminated coccidioidomycosis and may be the only extrapulmonic focus of dissemination.[6] In the southwestern United States, it is the most common fungal meningitis. In the eastern United States and in other nonendemic areas throughout the world, coccidioidal meningitis presents a puzzling clinical picture to physicians who lack personal experience with it. Frequently indistinguishable from other causes of chronic lymphocytic meningitis, it is necessary at the time of initial presentation to distinguish this process from the more common aseptic and bacterial diseases as well as from other central nervous system syndromes.

Symptoms. Usual signs of meningeal irritation are absent. Headache is a prominent symptom that is often severe, bitemporal, and throbbing.[7] Confusion, lethargy, and memory loss are very often noted.[7] It is important to comprehend the patient's previous level of intellectual function prior to the onset of his illness, which can usually be accomplished through family interviews. Whereas nuchal rigidity is frequently absent, a decreased mobility of the neck can often be appreciated with associated pain on active and passive motion.[6] Focal neurologic deficits are not uncommon.[7] Other clinical features include symptomatic hydrocephalus (progressive dementia, urinary incontinence, gait apraxia),[2] coccidioidal skin lesions, subcutaneous abscesses, and visual disturbances (photophobia, anisocoria, diplopia, nystagmus).[7] A lack of pulmonary parenchymal or pleural involvement is not uncommon.[7]

Cerebrospinal fluid abnormalities include pleocytosis, hypoglycorrhachia, and increased protein. Lymphocytes generally predominate, yet polymorphonuclear leukocytosis and eosinophilia have been reported. The coccidioidal complement-fixation test is positive in the CSF in up to 95% of patients, and detection of complement-fixing antibodies to *C immitis* in the CSF is diagnostic.[6] Antibodies detected in the CSF by immunodiffusion procedures are less specific for coccidioidal meningitis and have been demonstrated in nonmeningeal infections.[8] Transient complement-fixing antibodies to *C immitis* have been noted in the CSF in patients with parameningeal coccidioidal disease, such as vertebral body disease or bony lesions of the skull.[10] *C immitis* can be cultured from the CSF in 20% of clinical cases.[8]

The diagnostic utility of radionuclide scanning and computerized brain tomography in patients with clinical findings of hydrocephalus was recently addressed. Stadalnik et al reported ^{111}In flow studies and CT scans readily detect hydrocephalus in patients with coccidioidal meningitis in the first months of the complication.[10] Both procedures were shown to be highly specific, and ^{111}In CSF flow studies are also helpful in guiding the intrathecal drug therapy and determining the efficacy of the route of administration.[10] Additionally, they provide important information regarding the patency of therapeutic prosthetic devices, such as ventricular reservoirs.[11]

Treatment. Effective treatment necessitates experience with the use of potentially toxic drugs and the route of their administration. The importance of an active and reliable neurosurgery service cannot be overemphasized. Amphotericin B is the only drug at present with proved efficacy in the treatment of disseminated coccidioidomycosis with meningitis.[7] Prior to the introduction of amphotericin B, coccidioidal meningitis was an almost uniformly fatal disease, although scattered reports of prolonged survival without appropriate therapy have been noted.[7] Amphotericin B does not cross the blood-brain barrier effectively, thus necessitating intrathecal administration as well as intravenous therapy for coccidioidal meningitis.[7] The method of intrathecal administration of the drug has been widely debated. Cisternal puncture has been considered by many as the procedure of choice.[7] Its administration through puncture of the lumbar theca, however simple, is fraught with the severe complication of lumbar arachnoiditis. According to Bouza et al, hyperbaric lumbar injections have been described by Glynn and may be better tolerated.[7] Intraventricular administration via a reservoir is not routinely recommended, in that coccidioidal meningitis is a disease of the basilar meninges. Complications due to either obstruction or bacterial infection of these devices very often occur and frequently necessitate their removal or replacement.[6] Treatment is usually continued until antibody to *C immitis* in the CSF is no longer detected.

Summary

Coccidioidal meningitis is a frequent complication of disseminated coccidioidomycosis. Travelers may acquire this disease via the inhalation of *C immitis* arthrospores during short visits to the endemic area. Our case report confirms that advanced coccidioidomycosis may be seen outside its endemic area in patients who have recently traveled there and demonstrates the need for physician awareness of the possibility of this occurrence. A careful travel history should be obtained and appropriate serologic screening of the serum and CSF be done, whenever and wherever chronic meningitis is identified.

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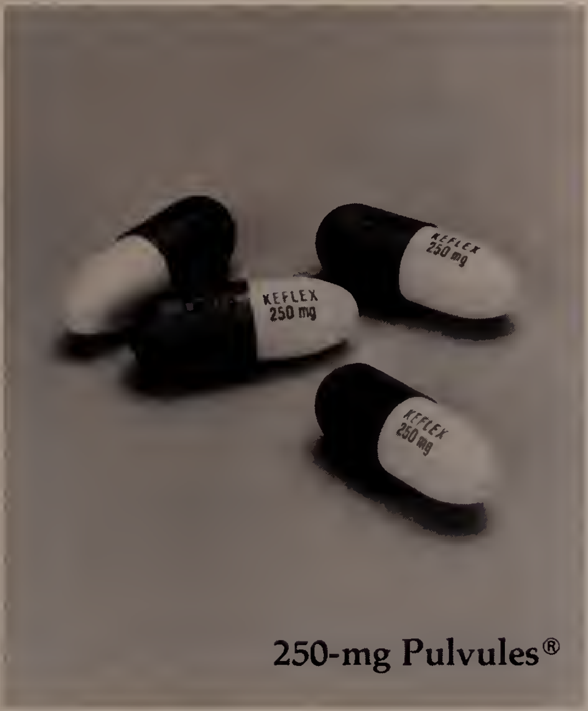

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References: 1. Shaw S, Lieber CS: Nutrition and alcoholism, chap. 40, in *Modern Nutrition in Health and Disease*, edited by Goodhart RS, Shils ME. Philadelphia, Lea & Febiger, 1980, pp. 1220, 1237. 2. Watkin DM: Nutrition for the aging and the aged, chap. 28, in *Modern Nutrition in Health and Disease, op. cit.*, p. 781. 3. Shils ME, Randall HT: Diet and nutrition in the care of the surgical patient, chap. 36, in *Modern Nutrition in Health and Disease, op. cit.*, pp. 1084, 1089, 1114. 4. Dixon RE: *Ann Intern Med 89* (Part 2): 749-753, Nov 1978. 5. Committee on Dietary Allowances, National Research Council: Recommended Dietary Allowances, ed 9. Washington, National Academy of Sciences, 1980, p. 13.

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Harry A. Birnbaum, M.D., Brooklyn. Died July 23, 1982; age 62. Middlesex University School of Medicine, 1944. Membership: Fellow American College of Chest Physicians; Diplomate American Board of Family Practice; Medical Society of the County of Kings; Medical Society of the State of New York.

Gordon H. Burgess, M.D., Buffalo. Died July 17, 1982; age 47. University of Buffalo School of Medicine, 1963. Membership: New York State Dermatological Society; American Academy of Dermatology; Diplomate American Board of Dermatology, Inc.; Medical Society of the County of Erie; Medical Society of the State of New York.

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SUGAR AND SUGAR ALCOHOLS

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Technological advances are altering the sources and forms of sugars available to us. In addition, remarkable advances in knowledge have been made concerning the physiologic and metabolic effects of sugars. These, along with the potential for using individual sugars for metabolic or physiologic advantages, has attracted considerable interest. However, many questions remain concerning claims and counterclaims regarding the qualities of one sugar over another.

Glucose, Fructose and Sucrose

Glucose, fructose and sucrose are the predominent sweet caloric sugars in the human diet. Fructose is about twice as sweet as sucrose if consumed under ideal test conditions in a cold, acidic solution, while glucose is about half as sweet as sucrose. In most other food systems, the differences are considerably less.

While glucose is actively transported across the small intestine, fructose is more slowly absorbed by facilitated diffusion.[1] Sucrose is hydrolyzed by sucrase in the brush border of the intestinal mucosa and then its constituent monosaccharides, glucose and fructose, are absorbed. Only 10% of the ingested glucose is taken up by the liver on the first pass and consequently, peripheral blood glucose levels rise following ingestion. Fructose, on the other hand, is rapidly taken up by the liver, so there is only a slight increase in blood fructose levels after ingestion.

The entry of fructose into liver cells and the initial steps of its metabolism are insulin independent. It is rapidly phosphorylated to fructose-1-phosphate by fructose kinase and is then cleaved into trioses by liver aldolase. The trioses produced may be utilized for the synthesis of glucose and triglyceride or can enter the glycolytic pathway. In normal animals and humans, most of the glucose formed will be stored as glycogen with only a modest release of glucose from the liver, resulting in only a slight increase in blood glucose concentrations immediately after fructose consumption.

The metabolic pathways of glucose are well known and complex. The individual pathway that glucose enters is determined by the nutritional and hormonal state of the body. Glucose can be used for energy, stored as glycogen in liver and muscles, or converted to lipids and stored as tryglyceride in adipose tissue. The various pathways appear to be regulated primarily by insulin, but other hormones and factors also contribute.

Except for its contribution to dental caries, there is no clear evidence to implicate sucrose as a hazard to health at levels currently consumed.[2] It is not known whether an increase in consumption of sucrose would constitute a dietary hazard.

Lactose and Galactose

Lactose, a disaccharide composed of glucose and galactose, is the primary sugar of mammalian milk, comprising about 7.5% of human milk and 4.5% of cow's milk. Lactose is only 30% as sweet as sucrose. Why lactose is the unique carbohydrate of milk is unknown since galactose needs can be met in most cases by biosynthesis from glucose. Lactose is hydrolyzed by lactase in the brush border of the small intestine. The sensitivity of lactase to digestive disturbances, the first of the disaccharidases to be affected, suggests it is located superficially in the microvilli.

Lactase deficiency (lactose intolerance) is present worldwide in large numbers of adults. Some studies suggest this deficiency is genetically controlled, while others suggest it is related to the dietary avoidance of lactose.[3] Congenital lactose intolerance in infants is rare.

Sorbitol, Mannitol and Xylitol

Sorbitol, mannitol and xylitol are sugar alcohols that contain 4 cal/g, the same as caloric sugars. Xylitol is equal in sweetness to sucrose, while sorbitol and mannitol are only half as sweet. All are more slowly absorbed from the gut than glucose and, except for diabetic individuals with severe insulin deficiency, ingestion of these alternative sweeteners causes lower blood glucose and insulin responses than glucose or sucrose. Depending on individual variation and consumption patterns, all three of the sugar alcohols can cause osmotic diarrhea when given in large amounts (more than 20-50 g). Evidence suggests, however, that xylitol may be tolerated in higher amounts if given in graded levels over a period of time. Initial steps of xylitol metabolism occurs in the liver in the absence of insulin. However, significant conversion to glucose can occur in the liver in a setting of insulin deficiency.

The report that xylitol ingestion results in a dramatic reduction in the incidence of dental caries (compared to sucrose or fructose)[4] suggests its importance as an alternative sweetener in highly cariogenic foods, such as chewing gum and sticky candies. However, questions of safety have led to its curtailment in most food uses until a thorough evaluation of toxicological data is conducted.

Efficacious Use of Sugars in Metabolic Disorders

The use or avoidance of various sugars has been advised in a variety of clinical situations.

- **Diabetes**

It is generally recommended that individuals with diabetes avoid glucose and sucrose, as it is felt that ingestion of these sugars leads to abnormally high blood glucose levels.[5] When diabetic subjects are poorly controlled, ingestion of fructose can lead to a considerable rise in blood glucose. This occurs because the liver is in a gluconeogenic state, triglyceride and glycogen synthesis are greatly impaired, and the glucose which is formed in the liver from fructose is rapidly released rather than stored as glycogen.[6] Thus, fructose use is contraindicated in this group of diabetic patients. However, when subjects with mildly impaired glucose tolerance or fasting hyperglycemia ingest fructose, postprandial glucose and insulin levels are considerably lower than the levels seen following sucrose or glucose consumption.[7] There may be reason to consider the use of fructose as a sweetener for this specific group of diabetics.

Short-term studies support the idea that fructose will result in reduced blood glucose, glycosuria, ketonemia, and insulin compared to glucose or sucrose in some insulin-treated diabetics.[8,9] Since long-term studies of the effectiveness of fructose have not been done, fructose cannot definitively be recommended as beneficial for diabetics; however, there seems no reason to avoid its use in the diet of treated diabetics as long as its caloric contribution is considered. The Committee on Food and Nutrition of the American Diabetes Association has endorsed the view that the oral use of limited amounts of fructose (<75 g/day) is acceptable for diabetics.[10]

Sorbitol, mannitol and xylitol are also considered acceptable alternative sweeteners for treated diabetics; however, their use is limited because they have a low level of sweetness and may cause diarrhea when taken in large amounts.

- **Reactive Hypoglycemia**

Although not common, reactive hypoglycemia is characterized by a low post-meal blood glucose level associated with hypoglycemic symptoms. The treatment for this disorder is dietary and involves the use of low carbohydrate foods, frequent small feedings and abstinence from glucose and sucrose. Dietary adherence is poor for this disease. Some suggested reasons for this are a chronic high intake of sugars and a difficulty in changing lifetime food habits. Fructose may be an alternative sweetener for these individuals as this sugar appears to prevent hypoglycemia, which occurs after the ingestion of glucose or sucrose.[11]

- **Weight Reduction**

It has been suggested that fructose is helpful in weight reduction because it is sweeter than sucrose and thus may provide equal sweetness with fewer calories. However, the optimal sweetness of fructose is modified in varying food preparations, thus compromising significant calorie savings. It has also been suggested that the decreased post-meal drop in blood glucose, observed after fructose ingestion, will prevent hunger and craving for food and thus aid weight reduction. Currently, there is no scientific evidence to support this idea. A synergism between fructose and saccharin has been reported with an increase in sweetness of 40-50%. Fructose also has been shown to mask the characteristic aftertaste of saccharin.[12] Thus, blends of fructose and saccharin could potentially provide desirable taste with additional caloric savings in some foods.

- **Dental Caries**

It is well accepted that dental caries is a diet-dependent disease. However, the relationship between sugar intake and caries incidence is complex and partly independent of dosage. Considerable differences have been demonstrated in the reaction patterns of various orally given sugars and sugar alcohols. Evidence indicates that all fermentable carbohydrates, including the sugars and most starches, appear to be cariogenic when consumed as single sugar sources. However, all of the nutritive sugars appear to be less cariogenic than sucrose. For example, fructose and xylitol have been reported to cause a reduction of caries incidence by 25% and 90%, respectively, compared to sucrose.[4]

- **Serum Triglycerides**

Both sucrose and fructose have been implicated as major factors in the pathogenesis of hypertriglyceridemia. Although experiments in rodents support the idea that fructose is uniquely glyceridemic, human studies have not supported this idea.[13,14,15] The available human evidence demonstrates that fructose does not cause elevations of plasma triglyceride levels, even when consumed in large amounts (up to 120 g/day).

- **Exercise**

Sugar supplements are often felt to increase athletic ability when performing in endurance sports and in relieving fatigue, but they apparently do not enhance performance in short events. Various sugars, such as honey or glucose, are often promoted to athletes as superior sources of quick energy. However, none are significantly different from sucrose in the rate at which they are provided to the body as glucose. All are rapidly digested and absorbed. Excess amounts of concentrated sugar can draw fluid into the gastrointestinal tract from other parts of the body and create problems of dehydration, especially in sports where sweat loss is important. Thus, any sugar should be taken in small amounts at frequent intervals.

It has recently been suggested that fructose ingested shortly before exercise may increase endurance because it does not cause a significant release of insulin, thus preventing the postprandial drop in blood glucose.[16] However, there is no human data to confirm this hypothesis.

Summary

As the types of sugars that are made available to and consumed by the American public change, new attention is focused on the matabolic and physiologic role of sugars in the diet. In spite of new research, misinformation about the nutritional and metabolic role of certain sugars still exists. In other areas, more research is needed to confirm or deny current theories as to the metabolic role of certain sugars. It is clear, however, that differences exist in the physiologic and metabolic effects of different sugars and these differences may prove beneficial in some clinical situations.

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Reprinted from Contemporary Nutrition, General Mills, Inc., December 1981, Volume 7, Number 12.

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Life Extension Institute, a pioneer preventive medicine organization, was acquired by Control Data in 1978. The institute has operated a clinic in Chicago since 1975, providing examinations and health services to hundreds of Chicago-area companies.

Call for financing

Health care for young people can be improved if third party payers in both the public and private sectors learn that comprehensive, personalized care saves money by preventing disease and promoting development, says the president of the American Academy of Pediatrics (AAP). In a message published in the AAP's journal, *Pediatrics*, as his term of office ends, Glenn Austin, M.D., Los Altos, CA., notes that preventive medicine long has been the foundation of pediatric practice. Pediatricians in the early days of the specialty, says Dr. Austin, "began to convince parents to bring their children for visits when they were well so that immunizations could be given, growth and development could be assessed, and advice on matters of diet and hygiene could be given." As a result, many contagious diseases became less frequent and severe and the quality of life for many children was improved. Dr. Austin also urges that pediatricians provide a broader range of services and increase the number of hours that they are available to patients and their families. The also should increase their skills in caring for organic and psychological disorders and in providing skillful, confidential care for young people.

Phenacetin removal from pain compounds

The Food and Drug Administration today proposed to remove phenacetin from pain compounds because its prolonged or abusive use can cause injury. FDA said phenacetin can cause kidney damage and anemia in persons who ignore label directions, take the products too long, or take too much. As a result, there have been reports of injuries and even deaths. Phenacetin is the "P" in APC pills, an old standby for headaches, and has been in many similar compounds under numerous brand names. The other common ingredients are aspirin and caffeine. In a notice in the Federal Register tomorrow, the FDA will say that any prescription or nonprescription drug product containing phenacetin will be unlawful a year thereafter. However, a manufacturer may request a hearing on the ban within 30 days. Earlier, FDA's advisory panel on over-the-ecounter analgesic products cited phenacetin's potential for causing kidney damage and blood disorders. Large doses over a long time, can also result in life-threatening kidney disease and possibly cancer of the kidney and bladder, the panel reported. Most of the products that contain phenacetin can be readily reformulated. Many have been reformulated already, in response to the panel's report. Phenacetin is easily replaced by either aspirin or acetaminophen, which have similar pain-killing and anti-fever qualities.

Arthritis drug recall and Oraflex (benoxaprofen) recall

The Food and Drug Administration (FDA) today announced that Eli Lilly & Co. is recalling supplies of its arthritis drug Oraflex from pharmacy shelves and advising pharmacists and physicians, by letter, to halt the drug's use. Distribution of the arthritis drug was suspended worldwide by Lilly last night after the United Kingdom halted its sale as a result of 61 deaths possibly associated with the product there. The U.K. suspension is for 90 days.

Lilly is also providing an address to which patients may send unused portions of Oraflex (benoxaprofen) for refund. The address is:

Eli Lilly & Co.
1202 South Dakota St.
Building #80
Indianapolis, Ind., 46225

The drug has been in use in the United Kingdom for approximately two years and in the United States for about three months. After its U.S. approval April 19, 12 deaths from liver and kidney failure were reported in the United Kingdom. All were among elderly persons at the highest dosage (600 mg.).

U.S. recommendations that elderly persons be started on a daily dose of half or two thirds that dose were emphasized in June in a boldface section of revised labeling and in letters from Lilly to all physicians.

The drug has been marketed in South Africa, Spain, Germany, Taiwan and Denmark, as well as in the U.K. and U.S. Earlier this week, Denmark had limited the drug to hospital use.

In the United States, wholesalers and pharmacists are being notified by Lilly, and FDA has approved a letter to physicians to be distributed by the company.

FDA's continuous review of serious reactions in the United States includes investigations of 11 deaths that may be associated with the drug. The United Kingdom pattern of deaths from liver and kidney failure has not been observed here, however.

After the initial 12 reports of death in the United Kingdom, the British registry of adverse effects turned up an additional 33 deaths of persons associated with benoxaprofen. An additional 16 cases were reported by the British yesterday.

Suspension of sales was jointly announced last night by Lilly and Health and Human Services Secretary Richard S. Schweiker and FDA Commissioner Arthur Hull Hayes, Jr., M.D.

Deadly substitutions

The Food and Drug Administration (FDA) today warned users of novelty cocaine substitutes that these "look-alike" products can be as deadly as the high-priced original. FDA has received reports of three deaths associated with injecting or sniffing these substitute white powders, many of which contain local anesthetics such as lidocaine, procaine and tetracaine. The substitutes are sold openly by mail and in "head shops" as novelty cocaine or incense under such names as Toot, Florida Snow, Supercaine, Ultracaine, Base-O-Caine and SuperiorCaine. The main dangers of these substitutes are that they can collapse blood vessels, depress heart muscle strength and cause low blood pressure. Because of the drug's high abuse and dependency potential, cocaine is regulated under the Controlled Substances Act by the Drug Enforcement Administration. Cocaine substitutes, however, are not con-

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MEDICAL SOCIETY

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BYLAWS

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MEDICAL SOCIETY OF THE STATE OF NEW YORK

BYLAWS

Revised 1982

ARTICLE I. NAME AND PURPOSE

The name and title of the State Society shall be the Medical Society of the State of New York. The purposes of the State Society shall be: to federate into one organization the medical profession of the State of New York; to extend medical knowledge and advance the science and art of medicine; to establish the *Principles of Professional Conduct* which shall be binding on the members of the Medical Society of the State of New York, the members of the component county medical societies, and the members of the component district branches, in all matters in their relation to each other and to the public; to enhance the delivery of medical care of high quality to all people in the most economical manner; to promote the betterment of community health; and to enlighten and direct public opinion in regard to the problems of medicine and health for the best interests of the people of the State.

ARTICLE II. MEMBERSHIP

SECTION 1. CLASSES

The membership in the Medical Society of the State of New York shall be divided into five classes: (a) active, (b) life, (c) honorary, (d) resident, and (e) student.

Active membership shall be limited to graduates of recognized medical or osteopathic schools who have completed not less than four satisfactory years of at least eight months each, or the equivalent, in a medical or osteopathic school in the United States of America or Canada registered as maintaining at the time a standard satisfactory to the medical or osteopathic licensing authorities of the State of New York, or in a medical or osteopathic school in a foreign country maintaining a standard not lower than that prescribed for medical schools in this State.

The active members shall be all active members in good standing of the component county medical societies. A copy of the roster of such members, certified to be correct by the respective secretary of each component county medical society, shall be evidence of the right of the members whose names appear therein to membership in the Medical Society of the State of New York.

Student members shall be those members enrolled in recognized medical or osteopathic schools in the State of New York who are pursuing a course of study leading to the degree of Doctor of Medicine or Doctor of Osteopathy. Eligible students may become members of the Medical Society of the State of New York. Concurrent membership in a component county society and the American Medical Association is not a requirement for student membership. They shall apply for student membership on a form supplied by the secretary together with such dues as are fixed by the House of Delegates. When a student member ceases to be enrolled in a recognized school of medicine or school of osteopathy in the State of New York pursuing a course of study leading to a degree of Doctor of Medicine or Doctor of Osteopathy, other than by reason of graduation, he shall be considered to have resigned from membership in the Medical Society of the State of New York.

A student member who is suspended from the rights and privileges of his medical or osteopathic school shall likewise be suspended for the same period from the Medical Society of the State of New York.

An active member in good standing who has completely withdrawn from the active practice of medicine and who has been a member in good standing for ten consecutive years or an active member in good standing who continues the active practice of medicine and who has been a member in good standing for the ten consecutive years prior to the attainment of the age of seventy years, or an active member in good standing for ten consecutive years or more who is permanently disabled, may apply for life membership. The House of Delegates or the Council may waive the requirements in a proper case where there appear to be extenuating circumstances. He shall apply for such life membership to the component county medical society of which he is a member. His application shall be governed by the constitution and bylaws of the component county medical society relative to active membership.

His application shall be signed by the president and the secretary of the component county medical society of which he is a member and sent to the secretary of the State Society for presentation to the Council for approval.

The honorary members of the Medical Society of the State of New York shall be such distinguished physicians residing outside the State of New York as may be elected. Nominations for honorary membership shall be endorsed by three members of the State Society and forwarded to the secretary of the State Society for presentation to the House of Delegates. A two-thirds vote of the House of Delegates present and voting shall be necessary for election to honorary membership.

Resident membership shall be limited to graduates of recognized medical or osteopathic schools who are in continuous residency training and who are resident members of a component county medical society. Any resident who is unable to join the component county society (societies) notwithstanding the provisions of Article XVIII, Section 2, paragraphs 5 and 6 of these Bylaws shall be eligible to join the Medical Society of the State of New York directly as a resident member.

This provision shall not affect the status of any individual currently in continuous residency training who became a member of a component county medical society prior to October, 1981.

SECTION 2. PRIVILEGES

Active members vote and hold office in the Medical Society of the State of New York.

They shall be entitled to receive the *New York State Journal of Medicine*, the *News of New York*, and the *Medical Directory of New York State*.

Life members shall not be subject to Medical Society of the State of New York dues or assessments but shall be accorded all the rights and privileges of active membership. They shall be entitled to receive the *New York State Journal of Medicine* and the *News of New York*, but the *Medical Directory of New York State* only on request.

Student members shall be entitled to receive the *News of New York*. Each student member shall only be entitled to receive the *New York State Journal of Medicine* upon his individual written request, on an annual basis. Student members shall not be entitled to receive the *Medical Directory of New York State* free of charge. In addition, student members shall be entitled to the rights and privileges otherwise accorded in these Bylaws to students.

The dues and assessments of resident members shall be no more than one tenth the amount levied on all other active members. The resident members shall be accorded all the rights and privileges of active membership. They shall be entitled to receive the *Medical Directory of New York State* only on request.

Honorary members shall be entitled to the privilege of attending the meetings of the Medical Society of the State of New York.

For a member elected after October 1, all rights and privileges of membership shall date from the time of election.

State Society dues and assessments of a member elected after October 1 shall be credited to the succeeding year.

A member of one component county medical society shall not be permitted to transfer to membership in another component county medical society until he has paid the current annual dues and assessments to the former component county medical society and has established a legal residence or practices in the county to which he desires transfer, except as provided in Article XVIII, "Component County Medical Societies," Section 2. The question of legal residence or locus of practice shall be verified by the component county medical society to which the member desires transfer.

Any member, except a member who is eligible and has applied for life membership, whose component county medical society and Medical Society of the State of New York dues are unpaid after April 1 of any current year or whose assessments are unpaid by the specified time is not in good standing and shall be deemed to be in arrears.

A member of the Medical Society of the State of New York who is in arrears for component county medical society dues and State Society dues or assessments shall not be eligible for any office or delegacy or be entitled to vote for any officer, councilor, trustee, or delegate.

A member whose dues are unpaid after May 1 or whose assessments are unpaid one month after the specified date shall be dropped from the rolls of membership of his component county medical society and the Medical Society of the State of New York upon reasonable notice to such member by his component county medical society, or the State Society, and without further action on the part of either the component county medical society or the State Society; and on such date he shall automatically cease to be a member of both the component county medical society and the State Society. In the case of nonpayment of dues, the reasonable notice to be provided shall commence on April 1, or as soon as possible thereafter, upon the determination that such member is in arrears.

A member who has been dropped from the roll of a component county medical society by reason of failure to pay dues shall not be accepted by another component county medical society except by regular transfer after reinstatement in the original component county medical society.

Medical Society of the State of New York dues of a member reinstated after October 1 shall be credited to the succeeding year, all rights and privileges of membership, however, dating from the time of reinstatement; but no member dropped for nonpayment of dues and assessments shall be reinstated until he has, in addition, paid his dues and assessments for the year in which he was dropped.

A member convicted in a court of law of a crime evidencing moral turpitude shall thereupon cease to be a member of the Medical Society of the State of New York.

A member expelled from his component county medical society or suspended from its rights and privileges shall likewise be expelled or suspended for the same period from the Medical Society of the State of New York. The right of appeal to the State Society shall not be impaired. Members not in good standing or ceasing to be members of their component county medical society shall *ipso facto* have the same status in the State Society.

SECTION 3. CONTINUING MEDICAL EDUCATION

An active member who fails to fulfill the requirements for continuing medical education established by the Council of the Medical Society of the State of New York shall not be in good standing. This section shall become effective on March 1, 1981.

An active member as defined in Article II, Section 1, who is found not to be in good standing as of March 1, 1981, or March 1 of any subsequent year, for failing to comply with paragraph 1 of this Section shall receive reasonable notice that he must fulfill continuing medical education requirements by the last day of December of the year in which he is found not to be in good standing. An active member who does not fulfill continuing medical education requirements by the last day of December of the year in which he is found not to be in good standing shall automatically cease to be a member of the component county medical society and the State Society, unless, in the view of the Council, specific mitigating circumstances exist that the physician could not complete the CME requirements.

ARTICLE III. HOUSE OF DELEGATES

There shall be a House of Delegates which shall be the legislative body of the Medical Society of the State of New York and shall be charged with the general management, superintendence, and control of the State Society and its affairs, and shall have such general powers as may necessarily be incident thereto, except as otherwise specifically provided by the Bylaws.

SECTION 1. COMPOSITION

The House of Delegates shall be composed of: (a) duly designated delegates from the component county medical societies; (b) officers of the Medical Society of the State of New York, councilors, and trustees; (c) a duly designated delegate from each district branch; (d) a duly designated delegate from each scientific section; (e) duly designated delegates from the student membership; (f) the Commissioner of Health of the State of New York, or a deputy designated by him, provided that any representative shall be a member of the State Society; (g) past-presidents of the State Society and any past president of the American Medical Association, provided that individual is a member of the Medical Society of the State of New York who shall be members for life; and (h) a representative from each of the medical schools in New York State, provided said representative is a member of the Medical Society of the State of New York.

The number of delegates to which each component county medical society is entitled shall be determined by one of the two following optional methods:

(a) Each component county medical society shall be entitled to as many delegates as there shall be State assembly districts in such county at the time of election, but each county medical society shall be entitled to elect at least 1 delegate;

(b) Any component county medical society, which according to the rolls of the Medical Society of the State of New York two months prior to the annual meeting, shall have had up to 99 members, shall be entitled to 1 delegate. Any component county medical society having 100 to 199 members shall be entitled to 2 delegates. Any component county medical society having 200 to 349 members shall be entitled to 3 delegates. Any component county medical society having 350 to 499 members shall be entitled to 4 delegates. Any component county medical society having 500 to 749 members shall be entitled to 5 delegates. Any component county medical society having 750 to 999 members shall be entitled to 6 delegates. Any component county medical society having 1,000 or more members shall be entitled to at least 7 delegates and 1 additional delegate for each additional 300 members. Each component county medical society shall be entitled to designate at least 1 delegate, but no component county medical society shall be entitled to designate more than 30 delegates.

A delegate to the House of Delegates shall not be considered in good standing or entitled to vote in the House of Delegates if the component county medical society by which he was elected is in default of the payment of any dues or assessments imposed by the House of Delegates, and said component county medical society has been duly notified of such default, or if such component county medical society shall at the time be under sentence of suspension imposed by the House of Delegates, or if such delegate is not in good standing in the Medical Society of the State of New York, or in the component county medical society to which he belongs.

The term of a delegate duly designated by a component county medical society, district branch, scientific section, or medical school shall begin at the first annual meeting of the House of Delegates subsequent to his designation.

A delegate shall practice or maintain residence or an office in the State of New York. Otherwise his office as a delegate in the Medical Society of the State of New York shall be declared vacant by the Council.

The student members of each medical school in New York State shall, at least sixty days prior to the annual meeting of the House of Delegates of the Medical Society of the State of New York, elect two members from among their number to represent them at the business meeting of the student members which shall be held immediately prior to the convening of the House of Delegates. At such meeting the representatives shall elect a chairman, vice-chairman, secretary, delegates, and alternate delegates. The medical student membership shall be entitled to one delegate and one alternate delegate and, according to the rolls of the Medical Society of the State of New York, sixty days prior to the annual meeting, one additional delegate for each additional 400 student members, up to a maximum of 3 delegates. No member shall hold more than one such office. The chairman, vice-chairman, and secretary shall conduct the business meeting and the delegates and alternate delegates shall represent the student members at the first annual meeting of the House of Delegates subsequent to their designation.

SECTION 2. DUTIES

The House of Delegates formulates policy for the Medical Society of the State of New York. No officer, councilor, board, commission, committee, or employee shall initiate any policy or commit the State Society to any policy unless such policy has been expressly approved by the House of Delegates or by the Council.

It shall elect the officers, councilors, and trustees of the State Society and the delegates to the American Medical Association. A student member of the Medical Society of the State of New York, who is in good standing, is eligible for election as delegate to the American Medical Association, provided he is a member of the AMA.

Credentials signed by the president and secretary shall be issued to delegates to the American Medical Association.

It shall pass on the credentials and qualifications of delegates and shall decide who are entitled to be members of the House of Delegates of the Medical Society of the State of New York.

It shall have authority and power to suspend or otherwise discipline its own members, district branches, component county medical societies, or any members of the Medical Society of the State of New York charged with special duties for and under authority of the State Society.

It shall provide for a division of the scientific work of the Medical Society of the State of New York into appropriate sections; for the organization of the district branches; for rules and regulations for its own government, and for the administration of the affairs of the State Society.

It shall provide for the issuance of charters to component county medical societies in affiliation with the Medical Society of the State of New York.

It shall have authority to appoint special committees from among members of the Medical Society of the State of New York.

SECTION 3. MEETINGS

The annual meeting of the Medical Society of the State of New York and the annual meeting of the House of Delegates shall be held at the call of the speaker.

Such annual meetings may be held during the annual convention of the Medical Society of the State of New York though this is not required.

The sessions of the House of Delegates may be adjourned from time to time as may be necessary. At least 30 days before the annual meeting of the House of Delegates, the speaker shall announce a schedule of the adjourned sessions of the House of Delegates. This schedule may be amended by the House of Delegates during its meeting.

Resolutions may be submitted to the House of Delegates only by members of the House of Delegates as individuals, or by component county medical societies, district branches, scientific section delegates, student membership delegates, and medical school delegates.

No new resolution shall be introduced at the last scheduled session except by a unanimous vote of the House of Delegates.

Special meetings of the House of Delegates shall be called by the speaker on the request in writing by 25 percent of the duly accredited delegates of the previous annual meeting of the House, or at the request of the Council; and in case of the failure, inability, or refusal of the speaker to act, such meetings may be called by a notice thereof subscribed by 25 percent of duly accredited delegates.

The notices of the annual and special meetings of the House of Delegates shall state the date, place, hour, and items of business that will be considered. These shall be mailed first class postpaid to each delegate not less than ten nor more than fifty days before such a meeting.

Publication of the notice of the annual meeting in the official publication of the Medical Society of the State of New York shall be considered as complying with this provision.

The affidavit of mailing by the secretary of the Medical Society of the State of New York to the last recorded address of the delegate shall be deemed sufficient proof of the service on each and every delegate for any and all purposes.

A quorum shall consist of 100 members of the House of Delegates.

The following shall be the order of business at the sessions of the House of Delegates:

1. Calling the meeting to order
2. Invocation
3. National Anthem
4. Report of Reference Committee on Credentials
5. Report by the secretary as to the presence or absence of a quorum
6. Remarks by the speaker
7. Reading of the minutes of the previous meeting by title
8. Address by the president
9. Report of House Committee on Bylaws
10. Report of the Judicial Council
11. Reports of Council commissions and committees
12. Report of the secretary
13. Report of the treasurer
14. Report of the Board of Trustees
15. Report of the executive vice-president
16. Reports of district branches
17. Reports of special committees
18. Reports of reference committees
19. Elections
20. Recess for annual meeting of the State Society
21. Unfinished business
22. New business
23. Adjournment

This order of business may be altered by the speaker with the approval of the House of Delegates and may be suspended by two-thirds vote of the House.

No delegate shall speak on any question before the House of Delegates for longer than five minutes nor more than once on any subject except by the consent of a majority vote of the House.

As the first business of the last scheduled session of the annual meeting of the House of Delegates, the officers, councilors, and the trustees of the Medical Society of the State of New York, and the delegates to the American Medical Association shall be nominated and elected.

The rules contained in *Sturgis Standard Code of Parliamentary Procedure* shall govern the House of Delegates in all cases in which they are not inconsistent or in conflict with the Bylaws of the Medical Society of the State of New York or the standing or special rules of the House of Delegates.

ARTICLE IV. COUNCIL

There shall be a Council which shall exercise all the rights and duties of the House of Delegates, consistent with the Bylaws of the State Society, when the House of Delegates is not in session. The Council, therefore, is in fact the executive committee of the House of Delegates.

SECTION 1. COMPOSITION

The Council shall be composed of the president, president-elect, vice-president, immediate past-president, secretary, assistant secretary, treasurer, assistant treasurer, speaker, vice-speaker, chairman of the Board of Trustees, and 12 councilors elected by the House of Delegates.

The trustees, the executive vice-president, the deputy executive vice-president, and the general counsel of the Medical Society of the State of New York shall attend all meetings of the Council with voice but without vote.

Four councilors shall be elected annually by the House of Delegates, each for a term of three years. In the event of a vacancy, a councilor shall be elected by the Council to serve until the next meeting of the House of Delegates, at which time the House of Delegates shall elect a councilor to fill the unexpired term.

No person shall serve, consecutively, more than two terms as councilor. An unexpired term shall not be construed as a term of office.

The councilors shall assume office on election and shall hold office until their successors are duly elected and qualified.

Councilors shall be assigned to specific county societies as liaison for the Council in accordance with the provisions of Article V, Section 2. Councilors shall be required to disseminate information of Council activity as well as returning information to the Council, and shall report regularly to the Council on their activity.

A councilor shall practice or maintain a residence or an office in the State of New York. Otherwise his position in the Medical Society of the State of New York shall be declared vacant by the Council.

If a councilor is absent from three consecutive regular meetings of the Council without proper excuse, the Council shall declare his position vacant and elect a successor for the unexpired term.

SECTION 2. DUTIES

The Council shall take such action as is necessary to carry out the Bylaws and to give full effect to any resolution or vote of the House of Delegates.

It shall also have power to legislate as a House of Delegates, when the latter is not in session, on all matters consistent with the Bylaws.

It shall have the authority to make policy for the Medical Society of the State of New York when the House of Delegates is not in session.

The Council's resolutions and actions shall be decisive and final except that all resolutions and actions of the Council are subject to review by the House of Delegates. Its actions shall be governed by the Bylaws of the Medical Society of the State of New York and the rules and regulations of the House of Delegates.

The Council shall have the authority to vote all funds of the Society subject to the approval of the Board of Trustees.

Should the Board of Trustees disapprove of the expenditure of any funds voted for by the House of Delegates or the Council, then and in that event, the Board of Trustees shall return the matter to either the House of Delegates or the Council, if the House of Delegates is not in session, which may override such disapproval by a three-quarter vote and direct the expenditure of such funds. The Board of Trustees shall not vote on this issue at a meeting of the House of Delegates and the chairman of the Board of Trustees shall not vote on this issue at the Council.

The Council shall have power to fill any vacancy which may occur in any elective office not otherwise provided for, until the next meeting of the House of Delegates.

The Council shall, by written notice, inform the component county medical societies of the specific Councilor assigned to it as liaison with the Council.

It shall prepare an annual budget for submission to the Board of Trustees.

The Council utilizing a search committee shall, with the approval of the Board of Trustees, appoint and reappoint an executive vice-president, who shall be the chief executive officer of the Medical Society of the State of New York, to manage and direct the activities of the State Society including disbursement of its funds when duly authorized. He shall be a member of all boards, commissions, and committees with voice but without vote. The executive vice-president shall appoint and reappoint a deputy executive vice-president subject to the approval of the Council.

The Council shall act on the applications for life membership which have been submitted by the component county medical societies. A majority vote of the Council present and voting shall be necessary for election to life membership.

The Council shall have responsibility for all publications of the Medical Society of the State of New York and their distribution. For the purpose of required announcements, the official publication of the State Society shall be the *New York State Journal of Medicine.*

Special committees shall report to the Council and shall be subject to the Council unless otherwise instructed by the House of Delegates.

The Council, with the aid of the general counsel of the Medical Society of the State of New York, shall examine the constitution and bylaws of component county medical societies and district branches and/or all amendments thereto which shall be submitted to the Council for approval and shall approve or disapprove of said amendments.

The duties of the Council shall include the supervision of all commissions, committees, and activities of the Medical Society of the State of New York.

The Council shall also keep constantly advised of the activities of and collaborate with the health and social service departments of the State and with hospitals, clinics, and social service agencies in furthering the health of the community.

Commissions and committees of the Council may include any member of the Medical Society of the State of New York who shall be appointed by the president subject to the approval of the Council.

The Council shall control all arrangements for the annual convention of the Medical Society of the State of New York.

SECTION 3. TRIALS FOR MALFEASANCE

The Council shall sit as a trial body for hearings on charges of malfeasance and/or nonfeasance.

Charges of malfeasance or nonfeasance preferred by a member against an officer, councilor, trustee, or member of a board, commission, or committee of the Medical Society of the State of New York shall be transmitted to the president in writing. The president shall order a trial on said charges by the Council, or a committee thereof.

Charges of malfeasance or nonfeasance preferred by a member against the president shall be transmitted in writing to the secretary of the Medical Society of the State of New York and shall be considered by the Council with the vice-president presiding.

The accused shall be given at least ten days' notice of such trial and of the charges against him and shall have full opportunity to defend himself, but no such officer, councilor, trustee, or member of a board, commission, or committee shall be removed or otherwise disciplined except by a three-fourths vote of the Council.

In case any such officer, councilor, trustee, or member of a board, commission, or committee shall be removed, he may appeal from the decision of the said Council to the House of Delegates; but, pending the determination of such appeal, he shall not exercise the functions of his office.

SECTION 4. EXECUTIVE COMMITTEE

The Council shall establish an executive committee to be composed of the president, the vice-president, the president-elect, the immediate past-president, the secretary, the treasurer, the chairman of the Board of Trustees, and two additional members of the Council appointed by the president with the approval of the Council.

This committee shall be appointed by the president and shall serve only during his tenure as president.

The executive committee shall have the authority to take action in case of emergency arising in the interim between the meetings of the Council to protect the interests and purposes of the Medical Society of the State of New York as set forth in these Bylaws. In times of such emergency, the executive committee shall have all the powers and duties which are conferred on the Council, and it shall at all times assist the Council. Any action taken by the executive committee shall be reported in full to the Council at its next meeting.

SECTION 5. MEETINGS

The newly elected Council shall meet at the close of the annual meeting of the House of Delegates. The Council and Executive Committee shall meet at regular intervals at times and places that shall be fixed by the president with the approval of the Council. Twenty-five percent of the members of the Council in writing may require the president to call a special meeting for such time and place as he shall designate, within ten days of his receipt of such notice.

The notices of the regular meetings of the Council shall state the date, place, hour, and shall be mailed postpaid to each member by first class mail not less than ten nor more than fifty days before a meeting.

The affidavit of mailing by the secretary of the Medical Society of the State of New York to the last recorded address of the Council member shall be deemed sufficient proof of the service on each and every Council member for any and all purposes.

Council members must receive at least three days' notice by letter or telegram from the State Society's office of a special meeting, which shall state the date, place, hour, and items of business that will be considered.

A quorum shall consist of 14 members of the Council.

The following shall be the order of business at meetings of the Council, which may be altered by the chairman with the consent of the Council:

1. Calling the meeting to order
2. Roll call
3. Reading of minutes
4. Communications
5. Report of the Executive Committee
6. Report of the president
7. Report of the secretary
8. Report of the treasurer
9. Report of the chairman of the Board of Trustees
10. Reports of councilors
11. Report of the executive vice-president
12. Reports of commissions and committees
13. Unfinished business
14. New business
15. Adjournment

ARTICLE V. OFFICERS

The officers of the Medical Society of the State of New York shall be a president, a president-elect, a vice-president, a secretary, an assistant secretary, a treasurer, an assistant treasurer, a speaker, and a vice-speaker of the House of Delegates. They shall take office at the termination of the annual meeting at which they are elected and shall serve for one year or until their successors have been duly chosen.

No person may serve, consecutively, more than five terms as secretary, treasurer, assistant secretary, assistant treasurer, speaker, or vice-speaker. An unexpired term shall not be construed as a term of office.

No salaried employee of the Medical Society of the State of New York shall be an elected officer of the Medical Society of the State of New York. For the purposes of this article an honorarium shall not be considered as a salary.

SECTION 1. VACANCIES AND SUCCESSION

An officer shall practice or maintain a residence or an office in the State of New York, otherwise his office in the Medical Society of the State of New York shall be declared vacant.

The president-elect shall succeed to the presidency at the end of his term as president-elect.

In the event of the president's death, resignation, removal, permanent incapacity, or refusal to act, the vice-president shall succeed him and shall serve for the remainder of the unexpired term.

If the president is temporarily incapacitated for service by injury, ill health of himself or his family, important professional duties, or any other mandatory absence, the vice-president shall become acting president for the duration of such incapacity of the president. The president shall promptly notify the vice-president of his incapacity and request his attention to the duties of the office and shall also promptly notify the vice-president of the end of the period of temporary incapacity before resuming the office of the presidency.

If the office of vice-president becomes vacant, for any reason whatsoever, the Council, when the House of Delegates is not in session, shall elect a successor for the unexpired term.

If the office of president-elect becomes vacant, it shall remain so until the next annual meeting of the House of Delegates, at which an eligible member shall be elected to become president. A president-elect to succeed him at the end of his term shall also be elected at the same meeting.

The assistant secretary, the assistant treasurer, and the vice-speaker shall serve as the secretary, the treasurer, and the speaker, respectively, whenever these senior officers are incapacitated for service by injury, ill health of themselves or families, important professional duties, or any other mandatory absences. This shall be construed so as to include duty at or during meetings of the Board of Trustees as well as the other official duties designated for the senior officer. The senior officer shall promptly notify the junior officer of his incapacity and request his attention to said duties. When the period of incapacity is ended, the senior officer shall promptly notify the junior officer of the end of the period of temporary incapacity before resuming office.

If the offices of secretary, treasurer, or speaker become vacant, for any reason whatsoever, these officers shall be succeeded by the assistant secretary, assistant treasurer, and vice-speaker, respectively, for the unexpired term.

If the office of assistant secretary, assistant treasurer, or vice-speaker becomes vacant, for any reason whatsoever, the Council, when the House of Delegates is not in session, shall elect a successor for the unexpired term.

If an elected officer is absent from three consecutive regular meetings of the Council, without proper excuse, the Council shall declare his office vacant. The vacancy shall be filled as provided in the Bylaws.

Any elected officer of the Medical Society of the State of New York who is called into active service in the armed forces of the United States or in the United States Public Health Service may, on application to the Council, be granted leave of absence for any portion of his term of office during which he is on active service. During such absence, his duties shall be delegated as the Council may direct except where such delegation is already provided for elsewhere in the Bylaws.

SECTION 2. DUTIES

President

The president shall set the dates and place of regular meetings of the Council and Executive Committee and shall preside at the meetings of the Medical Society of the State of New York, the Council, and the Executive Committee.

He shall name the appointive members of the Executive Committee and appoint the chairmen and members of all committees and the chairmen of all commissions of the Council with the approval of the Council. He shall appoint all other committees not otherwise provided for, with the approval of the Council.

Within three months after assuming the office of president, he shall appoint, as prescribed in Article XI, Section 2, a nominating committee, whose names he shall cause to be published in the official publication of Medical Society of the State of New York.

He shall be an *ex officio* member of all boards, commissions, and committees with voice and vote, with the exception of the Judicial Council, the Board of Trustees, and the Nominating Committee wherein he shall have voice but no vote.

With the approval of the Council, he shall apoint a member to the Judicial Council to succeed the member with an expiring term, and in the event of a vacancy occasioned otherwise, he shall appoint a member for the unexpired term.

He shall appoint, with the approval of the Council, representatives to other medical societies or similar bodies as the interests of the Medical Society of the State of New York may require.

He shall appoint a sufficient number of delegates or alternate delegates to the House of Delegates of the American Medical Association when the full quota of those elected is not available, as provided in the Bylaws, Article VIII, paragraphs 3 and 4.

He shall assign Councilors as liaison between the Council and specific county medical societies for the purpose of the dissemination of information to such societies.

He shall appoint, with the approval of the Council, a chairman and a secretary for each organized session of the Medical Society of the State of New York.

When charges by a member of malfeasance or nonfeasance are preferred against any other officer, councilor, trustee, or member of a board, commission, or committee of the Medical Society of the State of New York and are transmitted to the president in writing, he shall order a trial on said charges by the Council, or a committee thereof.

He shall assign the special branches of work for which the members of the Council shall be responsible, with the approval of the Council.

He shall make an annual report to the House of Delegates.

He shall deliver an address at the annual meeting of the House of Delegates. He shall perform such other duties as the House of Delegates or the Council shall require.

He shall attend all meetings of the House of Delegates of the American Medical Association.

President-Elect

The president-elect shall perform such duties as may be requested by the president.

The president-elect shall attend all meetings of the House of Delegates of the American Medical Association.

Vice-President

The vice-president shall perform the duties of the president in the latter's absence.

He shall preside over the Council when it is deliberating on charges of malfeasance or nonfeasance preferred against the president.

Secretary

The secretary shall attend all meetings of the Medical Society of the State of New York, the House of Delegates, the Council, the Board of Trustees, and the Judicial Council, and shall keep minutes of their respective proceedings. These minutes shall be copied from a stenographer's notes with such deletion only as will not modify, alter, or becloud the history of the actions of the said bodies. The stenographer's typewritten copy shall be preserved until ordered destroyed by the House of Delegates.

He shall perform such other duties as may be prescribed from time to time by the House of Delegates or the Council. He shall attend all meetings of the House of Delegates of the American Medical Association.

The secretary shall be the custodian of the seal of the Medical Society of the State of New York and of all books of records and papers belonging to the State Society, except such as properly belong to the treasurer, and shall keep an account of and promptly turn over to the treasurer all funds of the State Society which come into his hands.

He shall record the name and date of admission of each member of the Medical Society of the State of New York.

He shall provide for the registration of the members at all conventions of the Medical Society of the State of New York. With the aid and cooperation of the secretaries of the component county medical societies, he shall keep a proper register of all registered physicians of the State by counties.

He shall conduct the official correspondence, notifying members of meetings, officers, councilors, trustees, and board members of their election, and commissions and committees of their appointments and duties.

He shall affix the seal of the Medical Society of the State of New York to the credentials of delegates to the American Medical Association and to such other papers and documents as may require the same.

He shall make an annual report to the House of Delegates. Acting in cooperation with the Council, he shall prepare and issue all programs.

He shall be an *ex officio* member of all boards, commissions, and committees with voice and vote, with the exception of the Judicial Council, the Board of Trustees, and the Nominating Committee wherein he shall have voice but no vote.

Assistant Secretary

The assistant secretary shall aid the secretary in the work of his office.

Treasurer

The treasurer shall keep accurate books of accounts of all moneys of the Medical Society of the State of New York which he may receive and shall disburse or cause to be disbursed the same when duly authorized. He shall be the official custodian of all securities and the income thereof owned by the State Society, subject to the direction and disposition of the Board of Trustees. The Board of Trustees may select a bank or trust company to act as custodian in the place of the treasurer of all or any part of such securities and to act as agent of the State Society in collecting the income therefrom.

He shall collect, on or before the first day of April in each year, from the treasurer of each component county medical society, the Medical Society of the State of New York per capita annual dues. He shall collect any assessments voted by the House of Delegates or the Council. He shall, at the expense of the Medical Society of the State of New York, give a bond for the faithful performance of his duties, which shall be approved by the Board of Trustees as to amount, form, and surety. He shall make an annual report to the House of Delegates and report to the Council at each of its meetings. He shall be an *ex officio* member of the Professional Medical Liability Insurance and Defense Board, with voice but without vote.

Assistant Treasurer

The assistant treasurer shall aid the treasurer in the work of his office.

He shall, at the expense of the Medical Society of the State of New York, give a bond for the faithful performance of his duties, which shall be approved by the Board of Trustees as to the amount, form, and surety.

Speaker

The speaker shall preside at all meetings of the House of Delegates. He shall appoint all committees to serve during the meeting of the House of Delegates at least thirty days in advance of the meeting. All resolutions submitted by component county medical societies, district branches, scientific sections, and medical schools to be presented to the House of Delegates should be forwarded to the speaker at least forty-five days in advance of the annual meeting of the House and referred by him to the appropriate reference committees; and all resolutions sent in subsequent to forty-five days should be presented to the House and referred to the appropriate reference committees.

Vice-Speaker

The vice-speaker shall perform the duties of the speaker when so requested by the speaker.

ARTICLE VI. TRUSTEES

There shall be a Board of Trustees which shall have charge of all property including trust funds and shall supervise the financial affairs of the Medical Society of the State of New York.

SECTION 1. COMPOSITION

The Board of Trustees shall consist of seven members elected by the House of Delegates. The president, secretary, treasurer, executive vice-president, deputy executive vice-president, and general counsel shall sit with the Board of Trustees with voice but without vote.

One trustee shall be elected annually for a term of five years, but whenever the terms of two trustees expire in the same year, two trustees shall be elected each for five years.

To be eligible for election as trustee, a member shall have served at least two years as an officer or at least three years as a councilor, or at least five years as a member of the House of Delegates.

No person shall serve more than one term as a trustee. An unexpired term shall not be construed as a term of office.

A trustee shall practice or maintain a residence or an office in the State of New York, otherwise his position in the Medical Society of the State of New York shall be declared vacant.

If a trustee is absent from three consecutive regular meetings of the Board, without proper excuse, the Council shall declare his position vacant and elect a successor for the unexpired term.

In the event of a vacancy, a trustee shall be elected by the Council to serve until the next meeting of the House of Delegates at which time the House of Delegates shall elect a trustee to fill the unexpired term.

SECTION 2. DUTIES

The annual budget estimate, prepared by the Committee on Budget and Finance, after its approval by the Council, shall be submitted to the Board of Trustees for its approval.

All resolutions or recommendations of the House of Delegates or Council pertaining to expenditures of money must be approved by the Board of Trustees before the same shall become effective.

Should the Board of Trustees disapprove of the expenditure of any funds voted for by the House of Delegates or the Council, then and in that event, the Board of Trustees shall return the matter to either the House of Delegates or the Council, if the House of Delegates is not in session, which may override such disapproval by a three-quarter vote and direct the expenditure of such funds. The Board of Trustees shall not vote on this issue at a meeting of the House of Delegates and the chairman of the Board of Trustees shall not vote on this issue at the Council.

The Board of Trustees shall make and execute all contracts for the Medical Society of the State of New York. The fiscal year shall begin January 1 and end December 31 of each calendar year.

All moneys of the Medical Society of the State of New York received by the Board of Trustees, Council, or any member or agent thereof, shall be paid to the treasurer of the State Society. The Board of Trustees shall approve the bond of the treasurer and the assistant treasurer as to amount, form, and surety, and shall employ a certified public accountant licensed by the State of New York to audit the accounts of the treasurer and secretary and other agents of the State Society and present a statement of the same in its annual report to the House of Delegates.

The chairman of the Board of Trustees shall make a report to the House of Delegates of its transactions for the year and of the amount of money belonging to the Medical Society of the State of New York under its control.

SECTION 3. MEETINGS

The Board of Trustees shall meet immediately at the close of the annual meeting of the House of Delegates, and shall organize under the temporary chairmanship of the member senior in service on the Board, elect a permanent chairman, and fix the time and place of its regular meetings. Should two trustees have similar seniority, choice between them for temporary chairmanship shall be by lot.

The Board of Trustees shall meet at least bimonthly, except in July and August.

The notices of the regular and special meetings of the Board of Trustees shall state the date, place, and hour and shall be mailed first class postpaid to each member not less than ten nor more than fifty days before a regular meeting and at least five days before a special meeting.

The affidavit of mailing by the secretary of the Medical Society of the State of New York to the last recorded address of the trustee shall be deemed sufficient proof of the service on each and every trustee for any and all purposes.

Any three members of the Board of Trustees may require the chairman to call a special meeting at the office of the Medical Society of the State of New York for such time as shall be designated by them in writing.

A quorum shall consist of four members of the Board of Trustees.

The following shall be the order of business at the meetings of the Board of Trustees, which may be altered by the chairman with the approval of the Board:

1. Calling the meeting to order
2. Roll call by the secretary
3. Reading of minutes
4. Communications
5. Reports
6. Unfinished business
7. New business
8. Adjournment

ARTICLE VII. JUDICIAL COUNCIL

There shall be a Judicial Council which shall have jurisdiction to hear and determine all appeals from decisions on discipline of component county medical societies or decisions of such societies which may involve the privileges, rights, or standing of members, whether in relation to one another or to component county medical societies or to the Medical Society of the State of New York.

It shall hear also from applicants on appeals from the action of a component county medical society in excluding them from membership.

SECTION 1. COMPOSITION

The Judicial Council shall consist of five appointed members. One member shall be appointed by the president each year for a term of five years with the approval of the Council.

No member shall serve for more than two consecutive terms, but a member appointed to serve an unexpired term shall not be regarded as having served a term unless he has served three or more years.

A member of the Judicial Council shall practice or maintain a residence or an office in the State of New York, otherwise his position on the Judicial Council shall be declared vacant.

In the event of a vacancy, a member shall be appointed by the president for the unexpired term with the approval of the Council.

The president and secretary of the Medical Society of the State of New York shall be *ex officio* members of the Judicial Council with voice but no vote. The executive vice-president, the deputy executive vice-president, and the general counsel of the Medical Society of the State of New York shall sit with the Judicial Council with voice but without vote.

SECTION 2. DUTIES AND PROCEDURES

A member of a component county medical society who shall have been disciplined or directed to suffer discipline in any degree by any final decision of his component county medical society and who shall have exhausted his right of appeal, if any, with a component county medical society, feeling aggrieved by the decision of such society, may appeal to the Judicial Council of the Medical Society of the State of New York from the decision of such component county medical society by filing a notice of appeal with the secretary of the State Society and with the secretary of such component county medical society within three months after such final decision by such component county medical society.

An applicant for membership in a component county medical society who has been excluded from membership in such society may likewise appeal from the action of said society.

The Judicial Council shall investigate also all charges preferred (a) by a member of a component county medical society against a component county medical society of which he is not a member; and (b) by a component county medical society against another such component county medical society or a member thereof.

A notice of appeal shall set forth in writing the name of the appellant, the name of such component county medical society and the date and substance of the decision appealed from, and shall indicate the ground or grounds upon which such appeal is taken. If the appellant desires to be present, with or without counsel, at the hearing of said appeal, the notice of appeal must so state. In that event, the appellant must file with the notice of appeal a bond in the sum of $500 to cover the costs of said appeal. If the appellant fails to appear in person or be represented by counsel on hearing of said appeal, he shall forfeit to the Medical Society of the State of New York such shares of said bond as represents necessary expenditures incident to convening the Judicial Council for the hearing of said appeal.

On filing a notice of appeal, the appellant and the component county medical society shall submit to the secretary of the Judicial Council all records, minutes, letters, papers, and all written evidence, including a digest of all testimony not stenographically reported relating to the matter. All data so submitted shall be available only to the Judicial Council.

The Judicial Council shall consider the appeal on the data so submitted to it and may affirm, modify, or reverse the decisions so appealed from by a majority vote of the members present and voting. If, in its opinion, the taking of further evidence is advisable, the Judicial Council may summon witnesses and proceed to take such evidence in such manner as it may deem proper and render its decision by a majority vote of those present and voting, which decision shall be final and binding. A member shall have the right of appeal to the Judicial Council of the American Medical Association.

Whenever the Judicial Council has met, the secretary shall report the proceedings to the Council of the Medical Society of the State of New York at its next regular meeting.

The chairman shall submit an annual report of the Judicial Council to the House of Delegates.

SECTION 3. MEETINGS

Immediately at the close of the annual meeting of the House of Delegates the Judicial Council shall organize and elect its own chairman.

The secretary of the Medical Society of the State of New York shall be the secretary of the Judicial Council.

The Judicial Council shall meet on the call of the chairman. The notices of the meetings of the Judicial Council shall state the date, place, and hour and shall be mailed postpaid to each member not less than ten nor more than fifty days before a meeting.

The affidavit of mailing of the secretary of the Medical Society of the State of New York to the last recorded address of the member of the Judicial Council shall be deemed sufficient proof of the service on each and every member for any and all purposes.

A quorum shall consist of three members of the Judicial Council.

ARTICLE VIII. ELECTIONS

As the first business of the last scheduled session of the annual meeting of the House of Delegates, the officers, councilors, and trustees of the Medical Society of the State of New York, and the delegates to the American Medical Association shall be nominated and elected.

A member of the Medical Society of the State of New York who is in arrears for component county medical society dues or State Society dues or assessments shall not be eligible for nomination to any office, the Council, the Board of Trustees, or as a delegate to the American Medical Association, or entitled to vote for any officer, councilor, trustee, or delegate.

The delegates to the American Medical Association shall be elected in the calendar year preceding the meeting of the House of Delegates of the American Medical Association to which they are elected. One half of the allotted number of delegates and alternate delegates shall be elected each year.

Nominations for delegate to the American Medical Association shall be made for not less than double the full number of delegates to be elected.

SECTION 1. BALLOTING

After the appointment of a sufficient number of tellers by the speaker and after all nominations have been made, the secretary of the Medical Society of the State of New York shall cause to be displayed in full sight of the House of Delegates a list of nominees for each office of the Medical Society of the State of New York and for delegates to the American Medical Association, arranged in alphabetical order, and shall also cause to be distributed a sufficient number of blank ballots for the use of the House of Delegates. These ballots shall have printed or stamped thereon the appropriate headings for each office with spaces thereunder in which may be written the name of the candidate or candidates to be voted for.

All elections for offices of the State Society and delegates to the American Medical Association shall be by ballot, each member of the House of Delegates depositing his ballot on roll call individually. When after the call for nominations from the floor, there is only one candidate for an office, the speaker shall direct the secretary to cast one ballot on behalf of the delegates. If there are more than two nominees for an office, with the exception of that of delegate to the American Medical Association, and none receives a majority of votes on the first ballot, the nominee receiving the lowest number of votes shall be dropped and a new ballot taken for that office. This procedure shall be continued until one of the nominees receives a majority of the votes cast when he shall be declared elected.

For the election of delegates to the American Medical Association, the delegates shall be declared elected in the order of the highest number of votes cast until the allotted number shall have been chosen; a corresponding number in the next highest order of votes cast shall be declared alternate delegates.

When the full quota of elected delegates or alternate delegates is not available for attendance at the meeting of the House of Delegates of the American Medical Association, the president of the Medical Society of the State of New York shall appoint and certify a sufficient number to complete the quota.

A duly elected delegate to the American Medical Association who does not serve as such because of reduction in number of delegates to which the Medical Society of the State of New York is entitled shall fill any vacancy which may occur in the delegation before alternate delegates are designated for that purpose.

The delegates and alternate delegates shall take office at the beginning of the calendar year following their election and shall serve for a term of two years.

ARTICLE IX. REFERENDUM

At any meeting of the House of Delegates two thirds of the members present and voting may order a referendum vote of the Medical Society of the State of New York on any question consistent with the Bylaws and in accordance with such regulations respecting the submission of the question as the House of Delegates may prescribe.

The members of the Medical Society of the State of New York shall vote thereon by mail. The polls shall be closed at the expiration of fifteen days after the mailing of the question; and if the members voting shall comprise a majority of all the active and life members of the Medical Society of the State of New York, a majority of such vote shall determine the question and be binding on the State Society and the House of Delegates.

When the House of Delegates is not in session the Council may in a similar manner order such a referendum by a two-thirds vote.

ARTICLE X. COMMITTEES OF THE HOUSE OF DELEGATES

SECTION 1. REFERENCE COMMITTEES

At least one month before the meeting of the House of Delegates the speaker shall appoint and publish in the official publication of the Medical Society of the State of New York such reference committees as he shall deem expedient for the purposes of the meeting. Immediately after the organization of the House of Delegates he shall formally announce the appointments of the committees. Only members of the House of Delegates shall be eligible for appointment to the reference committees. Such committees shall each consist of five members, three members constituting a quorum, and shall serve during the meeting of the House of Delegates for which they are appointed.

Annual reports of officers, Council commissions and committees, Board of Trustees, Judicial Council, district branches, and special committees shall be printed at least one month before the meeting of the House of Delegates and sent to the members of the reference committees appointed according to paragraph 1, for their preliminary consideration.

All recommendations, resolutions, measures, and propositions presented to the House of Delegates and which have been duly seconded shall be referred by the speaker to the appropriate reference committees, except that reports of committees of the House of Delegates may, at the discretion of the House, be presented directly to the House without referral to the reference committees.

Each reference committee shall consider such business as may have been referred to it and shall report promptly to the House.

Any member of the Medical Society of the State of New York in good standing shall have the right to appear before any reference committee and participate in its deliberations.

SECTION 2. COMMITTEE ON BYLAWS

The House Committee on Bylaws shall be appointed annually by the speaker. It shall consist of at least five members including a chairman, all of whom shall be members of the House. The president, secretary, and the speaker shall be *ex officio* members with voice and vote. The executive vice-president, deputy executive vice-president, and general counsel of the Medical Society of the State of New York shall be members of the committee with voice but without vote.

It shall be the duty of the committee to study all proposed amendments to the *Bylaws* and the *Principles of Professional Conduct* of the State Society and to report thereon at the annual meeting of the House of Delegates following the meeting at which such amendments are proposed. The committee shall include in its report recommendations for action on the proposed amendments with reasons for such recommendations.

It shall be the duty of the committee to suggest amendments to or revisions of the *Bylaws* and the *Principles of Professional Conduct* of the Medical Society of the State of New York.

The report of the House Committee on Bylaws shall be presented directly to the House, without referral to a reference committee.

SECTION 3. SPECIAL COMMITTEES

Special committees may be created by the House of Delegates to perform the special functions for which they are created. They shall be appointed by the speaker or other officer presiding pro tempore over the meeting at which the committee is authorized.

ARTICLE XI. COUNCIL COMMISSIONS AND COMMITTEES

SECTION 1. ORGANIZATION

Committees of the Council are grouped by the related nature of their purposes and functions. A commission is composed of the chairmen of all committees within such a group.

Subject to the approval of the Council, the president shall appoint the chairmen and members of all of its committees and the chairmen of the commissions.

Any member of the Medical Society of the State of New York is eligible for membership on committees and commissions of the Council.

All chairmen of such commissions and committees shall have the right to present their reports in person to the Council and to engage in the discussion of such reports. Members of such commissions and committees shall have the privilege of presenting minority reports, and both the majority and minority reports shall be published.

Any *ex officio* member of a committee who enjoys that status by being a duly elected officer of the Medical Society of the State of New York shall have all the rights, responsibilities, and duties of any other member of the committee.

SECTION 2. NOMINATING COMMITTEE

The Nominating Committee shall be appointed by the president from a list of not less than three or more than five names submitted by the respective district branches, in conformity with Article V, Section 2, paragraph 3. It shall consist of 11 members, 1 from each district branch and 2 members at large.

In the event that a member of the Nominating Committee who has been selected as the representative of a particular district branch (or his alternate) shall be unable to attend the meeting of this committee, the president shall appoint an at large member, from the district branch whose representative is absent, to represent the interests of that district on the Nominating Committee. It shall be the duty of this committee to propose and nominate members of the Medical Society of the State of New York for all vacancies to be filled at the ensuing annual meeting of the House of Delegates. These recommendations shall be made to the House of Delegates in the same manner as prescribed in Article X, Section 1, paragraph 2.

SECTION 3. PROFESSIONAL MEDICAL LIABILITY INSURANCE AND DEFENSE BOARD

A committee to be known as the Professional Medical Liability Insurance and Defense Board shall be appointed by the president with the approval of the Council. It shall consist of nine members including a chairman, each appointed for a three-year term. No member shall serve for more than two consecutive terms. A vacancy created by expiration of a term shall be filled by the president, with the approval of the Council, by appointment of a member for three years. Other vacancies shall be filled for the unexpired term in similar manner. The secretary shall be an *ex officio* member of the committee with voice and vote. The treasurer shall be an *ex officio* member of the committee with voice but without vote. The general counsel and indemnity representative shall attend all meetings with voice but without vote. It shall be the duty of the committee to study and supervise, on behalf of the Medical Society of the State of New York, all matters having to do with professional medical liability insurance and defense.

ARTICLE XII. SECTIONS AND SESSIONS

As designated by the House of Delegates, there shall be sections devoted to the scientific work of the Medical Society of the State of New York and sessions devoted to scientific, cultural, historical, or economic subjects. Both sections and sessions shall meet during the annual convention of the State Society, under the supervision of the Council.

SECTION 1. SECTIONS

The House of Delegates shall designate those scientific sections entitled to representation in the Medical Society of the State of New York. Such sections shall correspond to the Statewide specialty societies recognized by the Council of the Medical Society of the State of New York. These scientific sections designated by the House of Delegates shall organize at their annual meeting by the election of officers. Officers to be elected shall include a chairman, a vice-chairman, a secretary, and a delegate to the House of Delegates. The chairman, vice-chairman, secretary, and delegate must be members of both the Statewide specialty societies and the Medical Society of the State of New York and shall be elected for one year terms with the exception of the secretary who shall be elected for such term as the section may deem desirable.

Each of the Statewide specialty societies recognized by the Council of the Medical Society of the State of New York shall be requested to submit to the office of the Executive Vice-President the name of one nominee for each office of their corresponding sections not less than ninety days prior to the section's annual business meeting. Such nominees shall be voted on, together with all other nominees submitted, at the annual business meeting of the section. All such nominees must be members of the Medical Society of the State of New York.

To participate in the election of any section, a member of the Medical Society of the State of New York must be registered with such section.

Should the delegate of a scientific section be unable to serve in the House of Delegates, the chairman of the section shall designate a substitute delegate and shall so notify the secretary of the Medical Society of the State of New York in writing.

The officers of the various sections shall prepare programs for their section under the direction and subject to the approval of the Council.

No new section shall be created by the House of Delegates unless a session devoted to its subject matter or specialty shall have been held at at least two successive annual conventions.

SECTION 2. SESSIONS

A session shall be a single meeting of a group to discuss scientific, cultural, historical, or economic subjects, under the direction and subject to the approval of the Council.

Each session shall have a chairman and a secretary who shall be appointed by the president with the approval of the Council.

ARTICLE XIII. MEETINGS

SECTION 1. ANNUAL CONVENTION

There shall be an annual convention of the Medical Society of the State of New York to be held at a time and place designated by the House of Delegates or by the Council.

This convention shall include the annual scientific program which shall include the annual meetings of the sections and sessions, scientific motion pictures, and exhibits, and such other activities, and presentations as the House of Delegates or Council may direct.

The annual meetings of the Medical Society of the State of New York and the House of Delegates may or may not be held at such convention pursuant to the provisions of Article III, Section 3 of these Bylaws.

SECTION 2. ANNUAL MEETING OF MEDICAL SOCIETY OF THE STATE OF NEW YORK

The Medical Society of the State of New York shall hold its annual meeting at the last scheduled session of the House of Delegates, while the House is recessed following the annual elections. The president shall preside at this annual meeting of the State Society, which shall include the induction of the incoming president. The incoming president shall deliver his inaugural address at the annual meeting of the State Society.

Following the adjournment of the annual meeting, the House of Delegates shall reconvene to complete its agenda and receive the report of the tellers.

SECTION 3. SPECIAL MEETINGS

Special meetings of the Medical Society of the State of New York shall be called by the president on the request in writing of members entitled to cast ten percent of the total number of votes entitled to be cast at such meeting. Such request must specify the date and month of such meeting, which shall not be less than two nor more than three months from the date of such written demand. The president of the Society upon receiving the written request shall direct the secretary to promptly give notice of such meeting. If the secretary shall fail to give such notice within five business days of such request, any member signing such request may give the required notice.

SECTION 4. ORGANIZATION AND PROCEDURES

The notices of the annual convention and annual and special meetings of the Medical Society of the State of New York shall state the date, place, and hour and shall be mailed postpaid to each member by first class mail not less than ten nor more than fifty days before a meeting.

Publication of such notice in the official publication of the Medical Society of the State of New York shall be considered as complying with this provision.

The affidavit of mailing by the secretary of the Medical Society of the State of New York to the last recorded address of the member shall be deemed sufficient proof of the service upon each and every member for any and all purposes.

Each member in attendance at the annual convention of the Medical Society of the State of New York shall enter his name and the name of the component county medical society to which he belongs in a register to be kept by the secretary of the State Society for that purpose. No member shall take part in any of the proceedings of such convention until he shall have complied herewith.

All members in good standing so registered may attend and participate in the proceedings and discussions of the scientific meetings of the Medical Society of the State of New York and of the sections and sessions.

A distinguished physician of a foreign country or a physician not a resident of this State who is a member of his own state medical association may become a guest during any annual convention upon the invitation of the president or officers of the Medical Society of the State of New York, and may be accorded the privilege of participating in all the scientific programs of the convention.

No address or paper before the Medical Society of the State of New York, except those of the president and president-elect, shall occupy more than twenty minutes in its delivery.

All papers read before the Medical Society of the State of New York at its annual convention by its members shall become the property of the State Society. Whenever such paper shall be deemed not acceptable for publication in the *New York State Journal of Medicine* it shall be returned to the author as promptly as possible after its receipt in the publication office of the State Society.

The following shall be the order of business at the annual meeting of the Medical Society of the State of New York:

1. Calling the State Society to order
2. Reading of minutes of the last meeting by title
3. Induction of incoming president
4. Inaugural address by incoming president
5. Adjournment

The rules contained in *Sturgis Standard Code of Parliamentary Procedure* shall govern the Medical Society of the State of New York in all cases in which they are not inconsistent or in conflict with the Bylaws of the State Society.

ARTICLE XIV. FUNDS

Funds shall be raised by annual dues levied on each active member at a uniform per capita rate throughout the State. Funds may also be raised in any other manner approved by the House of Delegates or by the Council when the said House of Delegates shall not be in session.

The approval of the Council and of the Board of Trustees shall be necessary for the expenditure of any funds of the Medical Society of the State of New York, except that the said Board may delegate, to such person or persons as it sees fit, the authority to expend funds of the State Society in amounts and under conditions to be determined by said Board, on recommendation of the Council.

ARTICLE XV. DUES

The annual dues shall be determined by the House of Delegates.

Assessments can be levied by the House of Delegates or the Council and shall be payable within a period of time specified by them.

The dues and assessments of those active members who have been graduated from medical or osteopathic college not more than five calendar years, not counting active service in the armed forces of the United States or in the United States Public Health Service, shall be one third the amount levied on all other active members. The dues and assessments of those active members who have not completed their continuous residency training shall be one tenth the amount levied on all other active members. In no case may an active physician continue to pay such reduced dues more than seven years after the date of graduation from medical or osteopathic school. The dues and assessments of those active members entering solo practice for the first time, who are not otherwise eligible for reduced dues as set forth in prior provisions in this paragraph, shall be one half the amount levied on all other active members, for the first two years of solo practice; full dues shall be paid after the first two years of solo practice. Once an active member pays full dues, he shall no longer qualify for half-dues status.

Life and honorary members shall not be required to pay dues or assessments to the Medical Society of the State of New York.

Annual dues are due and payable on the first day of January each year. The dues year shall coincide with the calendar year, January 1 to December 31.

Any member, except a member who is eligible for and has applied for life membership, whose component county medical society and State Society dues are unpaid after April 1 of any current year or whose assessments are unpaid by the specified time is not in good standing and shall be deemed to be in arrears.

A member whose dues are unpaid after May 1 of any current year or whose assessments are unpaid one month after the specified date shall be dropped from the roles of membership of his component county medical society and the Medical Society of the State of New York upon reasonable notice to such member by his component county medical society or the State Society, and without further action on the part of either the component county medical society or the State Society, and on such date he shall automatically cease to be a member of the component county medical society and State Society. In the case of nonpayment of dues, the reasonable notice to be provided shall commence on April 1, or as soon as possible thereafter, upon the determination that such member is in arrears.

Dues and State Society assessments of a member elected or reinstated after October 1 shall be credited to the succeeding year, but no member dropped for nonpayment of dues and assessments shall be reinstated until he has, in addition, paid his dues and assessments for the year in which he was dropped.

The dues of an active or student member of the State Society may be remitted for the current year by action by the Council on account of illness, financial hardship, or temporary active service in the armed forces of the United States or in the United States Public Health Service, when the request for such remission is made by the member's component county medical society, except in the case of student members who shall make application for remission directly to the secretary. Such a request shall be accompanied by a brief summary of the reasons therefor. Remission of dues due to illness or financial hardship shall be reviewed annually.

ARTICLE XVI. EXPENSES

Allowances for expenses incurred in the actual performance of official duties by officers, councilors, trustees, members of the Judicial Council and of commissions and committees, delegates to the American Medical Association, and employees of the Medical Society of the State of New York shall be made in conformity with the following conditions.

The president and the president-elect shall be allowed a per diem and expenses when engaged on official business. The amount of the per diem shall be set by the House of Delegates.

All other officers, councilors, trustees, members of the Judicial Council, delegates to the House of Delegates of the American Medical Association or an alternate delegate who, at the direction of the Council, attends a meeting of the House of Delegates of the American Medical Association, members of commissions and committees of the Council, and of all special committees, members of the Medical Society of the State of New York appointed by the president or the Council to carry out special assignments for the State Society, and employees of the State Society shall be allowed traveling expenses when engaged on official business.

Members for life of the House of Delegates, delegates of the district branches, scientific sections, and student members, sitting in the House of Delegates, shall be allowed necessary expenses by the Medical Society of the State of New York.

Proper vouchers must be filed with the secretary of the Medical Society of the State of New York before any of the above allowances shall be made.

There shall be no allowances for the expenses, traveling or otherwise, for members of any reference committee.

Each district branch shall be entitled to receive a sum in accordance with the number of members in the district branch. The maximum allowable amount shall be $1,000 to district branches of less than 1,000 members; $2,000 to district branches of more than 999 but less than 2,000 members; $3,000 to district branches of more than 1999 but less than 4,000 members; $5,000 to district branches of more than 3999 members, exclusive of the work done by the Medical Society of the State of New York regarding notices, programs, and so on, to defray the expenses of such district branch, provided a proper statement of such expenses shall have been presented to the secretary.

All bills, claims, or vouchers herein provided for shall be filed within thirty days after the date of the incurring of such expense. This time may be extended for any cause by the Board of Trustees.

ARTICLE XVII. DISTRICT BRANCHES

SECTION 1. DIVISION

The membership of the Medical Society of the State of New York shall be divided into nine district branches, as follows:

The First District Branch shall comprise the members of the Medical Societies of the Counties of Bronx, Kings, New York, Queens, and Richmond.

The Second District Branch shall comprise the members of the Medical Societies of the Counties of Nassau and Suffolk.

The Third District Branch shall comprise the members of the Medical Societies of the Counties of Albany, Columbia, Greene, Rensselaer, Schoharie, Sullivan, and Ulster.

The Fourth District Branch shall comprise the members of the Medical Societies of the Counties of Clinton, Essex, Franklin, Fulton, Hamilton, Montgomery, Saratoga, Schenectady, Warren, and Washington.

The Fifth District Branch shall comprise the members of the Medical Societies of the Counties of Cayuga, Chenango, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, and St. Lawrence.

The Sixth District Branch shall comprise the members of the Medical Societies of the Counties of Broome, Chemung, Cortland, Delaware, Otsego, Schuyler, Tioga, and Tompkins.

The Seventh District Branch shall comprise the members of the Medical Societies of the Counties of Livingston, Monroe, Ontario, Seneca, Steuben, Wayne, and Yates.

The Eighth District Branch shall comprise the members of the Medical Societies of the Counties of Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans, and Wyoming.

The Ninth District Branch shall comprise the members of the Medical Societies of the Counties of Dutchess, Orange, Putnam, Rockland, and Westchester.

Changes in the number or membership of these district branches may be made by a two-third vote of the House of Delegates at any annual meeting thereof.

SECTION 2. AIMS AND ORGANIZATION

The objectives of the district branches shall be to promote the scientific, social, cultural, and other interests of the medical profession within the district and to cooperate with the Council of the Medical Society of the State of New York in any way which that body may advise.

Each district branch may adopt a constitution and bylaws for its government and may amend them. The constitution, bylaws, and amendments shall not be in conflict with the Bylaws of the State Society and before becoming effective they shall be approved by the Council.

SECTION 3. OFFICERS AND ELECTIONS

Each district branch shall elect a president for two years and a delegate to the House of Delegates for two years, but with the approval of the Council a district branch may elect a president for one year.

Each district branch shall elect such other officers as are provided for in its bylaws. They shall attend the business meetings of the branch.

In the case of the inability of the delegate of a district to serve, the vice-president shall serve as delegate, and if the vice-president is unable so to function, the president shall designate a substitute delegate to serve and shall so notify in writing the secretary of the Medical Society of the State of New York.

Any elected officer of a district branch who is called into active service in the armed forces of the United States or the United States Public Health Service may, on application to the Council, be granted leave of absence for any portion of his term of office during which he is on active service. During such absence his duties shall be designated as the Council may direct, except where such delegation is already provided for elsewhere in the Bylaws.

The president of each district branch shall visit the component county medical societies of the district at least once during his tenure of office and make a careful inquiry of the condition of the profession in each county in his district and shall report thereon to the House of Delegates.

ARTICLE XVIII. COMPONENT COUNTY MEDICAL SOCIETIES

SECTION 1. DEFINITION

The term "component county medical society" shall include all county medical societies now in affiliation with the Medical Society of the State of New York or which may hereafter be organized and chartered by the House of Delegates. There shall be but one component county medical society in each county affiliated with the State Society. If there should be an insufficient number of physicians in any of the counties of this State to form themselves into a component county medical society, such physicians may become members of the component county medical society of an adjoining county when eligible by the constitution and bylaws of such component county medical society.

SECTION 2. MEMBERSHIP

Eligibility for membership in a component county medical society shall be determined by that society. Except by the approval of the Council no physician shall be an active member in a component county medical society other than that of the county in which he practices or maintains legal residence.

Whenever an active member in good standing or a life member in any component county medical society removes to another county in this State, his name on his request shall be transferred to the roster of the component county medical society of the county to which he removes, without cost to him, provided that he files a certificate with the secretary of the Medical Society of the State of New York, signed by the president and secretary of the component county medical society from which he removes as to his good standing in such society, and provided his application for membership has been acted on favorably by the members of the component county medical society of the county to which he has removed.

No physician shall be granted membership by any county medical society in any category of membership which has been created for the benefit of physicians who neither reside nor practice in such county, unless and until such county medical society verifies, with the Medical Society of the State of New York, the fact that the applicant currently holds either active, junior, or life membership in another county of this State. This requirement applies with equal force whether the category of membership on the local county medical society level be designated "associate membership," "affiliate membership," "corresponding membership," "nonresident membership," or by any similar designation.

No member shall be an active member of more than one component county medical society, nor shall any component county medical society accept as a member a physician who does not practice or have a residence in that county in any other way than in accordance with the law governing transfers.

Every component county medical society shall provide for membership for graduates of recognized medical or osteopathic schools who are in continuous residency training. The constitution and/or bylaws of the component county medical society shall provide that residents shall be eligible for membership whether or not they are duly licensed and registered to practice in the State of New York. The resident members will have all the rights and privileges of active membership. Dues and assessments for the members in continuous residency training shall be no more than one tenth the amount levied on all other active members.

Except by the approval of the Council, no resident may be a member in a component county medical society other than that of the county where he is in residency training or where he maintains his legal residence.

SECTION 3. DUTIES OF OFFICERS

The secretary of each component county medical society shall keep a roster of its members in which shall appear the full name of each of said physicians, the date of his admission to such society, his residence, and the date when his license to practice medicine in this State was granted. He shall note any changes in said roster by reason of removal, death, or change of name, revocation of license, or other disqualification.

He shall forward said roster and information together with the names and places of residence of each of the officers of said society and the names and residences of each delegate to the House of Delegates from said society to the secretary of the Medical Society of the State of New York at least ninety days before the date of the annual meeting of said House of Delegates.

The treasurer of each component county medical society shall forward to the treasurer of the Medical Society of the State of New York the amount of the State Society per capita dues and/or assessments and the amount of all American Medical Association dues collected from members of his component county medical society as promptly as possible, but in any event before the first day of April of each year.

SECTION 4. MEETINGS

Each component county medical society shall hold an annual meeting for the purpose of electing officers and a delegate or delegates to represent it in the House of Delegates of the Medical Society of the State of New York in accordance with the Bylaws.

The annual meeting of each component county medical society shall be held between January 1 and July 1 of each year at a time which it shall determine.

All officers of the component county medical society shall enter on their official duties between May 1 and July 1 at a date determined by the component county medical society and shall serve for a term of one year or until their successors shall have been duly elected and qualified.

SECTION 5. RESIGNATIONS

An active or life member in good standing whose resignation from membership in his component county medical society shall have been duly accepted, shall be considered to have resigned from the Medical Society of the State of New York.

When a member in good standing, other than a life or honorary member, ceases, between May 1 and December 31 of any year, to reside and practice in the State of New York, he shall be considered to have resigned from membership effective as of that December 31. If such cessation to reside and practice occurs between January 1 and May 1 of any year, he shall, provided he has been in good standing for the prior calendar year, be considered to have resigned from membership effective as of the previous December 31.

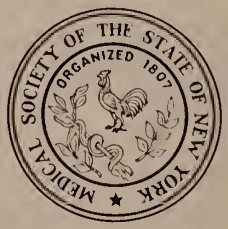
On resignation, a member shall forfeit all rights and title to any share in the privileges and property of the Medical Society of the State of New York, the district branch, and his component county medical society.

SECTION 6. CONSTITUTION AND BYLAWS

Each component county medical society shall adopt a constitution and/or bylaws for regulation of its affairs and may amend them. The constitution, bylaws, and amendments shall not be in conflict with the Bylaws of the Medical Society of the State of New York, and before becoming effective, they shall be approved by the Council.

ARTICLE XIX. SEAL OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

The seal of the Medical Society of the State of New York shall be as follows:



ARTICLE XX. AMENDMENTS

Amendments to the *Bylaws* or to the *Principles of Professional Conduct*, except such as are obligatory by law, shall be made only at an annual meeting of the House of Delegates after having been submitted in writing at a previous annual meeting and having been published in the official publication of the Medical Society of the State of New York at least once and at least one month before the annual meeting at which action shall be taken.

The affirmative vote of two thirds of the House of Delegates present and voting shall be necessary for adoption of any amendment.

Amendments made necessary by law shall be made either by the Council or House of Delegates whenever such necessity exists.

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MEDICAL SOCIETY OF THE STATE OF NEW YORK
ORGANIZED 1807

Doctor: What you can't do alone, we can do together!

SPECIALTY COUNTY/STATE AMA

We're your county and state medical societies, and the American Medical Association.

What you can't do alone:

Keep government regulations from interfering with your practice.

Challenge regulations that threaten you and your patients' interests.

Assure a constant flow of information on the latest medical advances.

Influence policies of organized medicine with which you disagree.

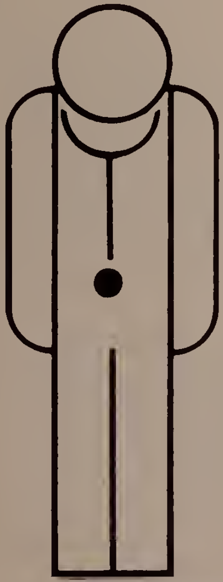
What we can do together:

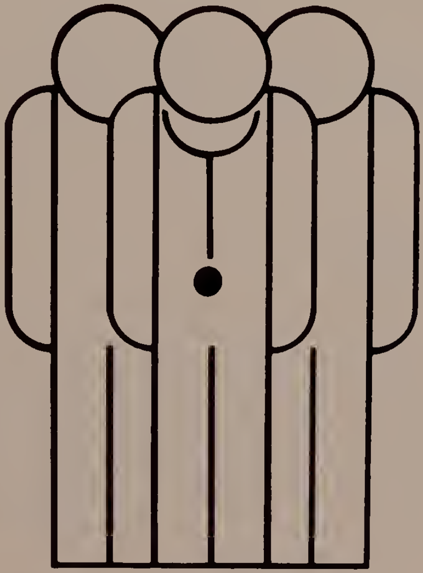
Effectively represent and protect our interests and rights at local and national levels.

Mount legal campaigns to defend our rights — up to the Supreme Court if necessary.

Keep you up to date with JAMA, your specialty, state, and county journals, and CME.

Have your voice and views heard and respected.





Join Your Medical Societies Today.

For information on how to join at all levels of the Federation,
contact the Medical Society of the State of New York
(516) 488-6100

(*continued from page 102*)

trolled under that act, but are subject to FDA regulation under the Federal Food, Drug and Cosmetic Act.

FDA has notified manufacturers of the types of anesthetics used in cocaine substitutes of its concern over this public health problem. The manufacturers are being asked to initiate stringent controls over the distribution of the bulk anesthetics to assure that they are offered for sale only to legally authorized firms.

FDA Commissioner Arthur Hull Hayes, Jr., M.D., said, "The diversion and misuse of these cocaine substitutes is a newly emerging public health problem with deadly consequences. We are asking all manufacturers and distributors to help stop this diversion of these relatives of cocaine." FDA investigation of the problem is continuing. If the problem is not resolved by the manufacturers, FDA will initiate further regulatory action to control the manufacture and distribution of these cocaine substitutes, including action against the distributors of illegal products. Such actions may include court actions to seek to resolve lany illegal activity.

NIA Aging update

A major new finding reported in the September 10, 1982 issue of *Science* has linked the results of two separate avenues of research on Alzheimer's disease — research that suggests that aluminum may contribute to the disease's development, and research that probes the excess incidence of dementia in three separate populations. Alzheimer's disease is the most common form of "senility" among the elderly. In a decade marked by major advances in the fields of neuroscience and aging research, scientists have employed a variety of methods to investigate the possible cause(s) of Alzheimer's disease. Their studies have looked at the roles of heredity, trace metals, deleterious changes in brain chemistry, and slow-acting viruses, as well as the effect of changes in the aging immune system. This latest finding focuses on the hallmark of Alzheimer's disease, the presence of tangled fibers in the brain cells of victims.

Hospice reimbursement legislation

On August 19, 1982, Congress adopted legislation that will provide hospice care coverage to terminally-ill Americans who are eligible for Medicare benefits. The legislation, incorporated in the Tax Equity and Fiscal Responsibility Act, presently awaits the President's signature. The legislation, endorsed by the National Hospice Organization, was actively supported in Congress by the National Hospice Education Project, an ad-hoc coalition of several hundred hospice and other health care providers.

Hospice care is an alternative to therapeutic or institutional care for the terminally-ill and the care is provided primarily in the patient's home. The hospice concept emphasizes psychological, emotional, physical and spiritual support to the terminally ill and their families. Hospice care is provided by a team of nurses, physicians, social workers, counselors and volunteers. The team provides palliative and supportive services that relieve the pain and stress of terminal illness.

The legislation allows Medicare reimbursement to qualified hospices that provide physician services, nursing care, medical social services, homemaker-home health aide services, short-term inpatient care, out-patient drugs for pain relief and respite care. Hospices will be expected to provide a core of basic services directly to patients, but they will be given the flexibility to make arrangements with other Medicare-eligible agencies to provide physical and occupational therapy, therapy for speech-language pathology, inpatient and other services to the terminally ill. Hospices must retain supervision of the care provided to patients under such arrangements.

The hospice reimbursement legislation was introduced in Congress in December, 1981, by Senator Robert Dole (R-KS) and Congressman Leon Panetta (D-CA). The legislation was revised by Senator John Heinz (R-PA) and attached as an amendment to the tax bill. Congressional estimates project that the legislation will save Medicare between $16 million and $33 million over the first three years of enactment. The Congressional Budget Office projects an estimated $109 million in savings to the Medicare system over the five-year period of the legislation.

Approximately half of current hospice users are eligible for Medicare benefits. The majority of hospice users are over 65 years of age and are dying from cancer. Medicare beneficiaries with a life expectency of six months or less will be able to elect hospice care in lieu of more expensive therapeutic services usually provided in hospital settings.

The hospice reimbursement legislation is an innovative and cost-effective alternative for care of the terminally ill. It has a broad base of support both in Congress and among hospice providers as a means of providing dignified treatment to the terminally ill and their families.

For further information contact: National Hospice Organization, 1311A Dolley Madison Boulevard, McLean, Va. 22101, (703) 356-6770.

Resolution passed

The Deans of the Associated Medical Schools of New York have issued a resolution for a nuclear weapons freeze as follows:

Resolution for a mutual USA and USSR nuclear weapons freeze

Whereas, A nuclear war, even fought on a "limited" scale, would result in disease and death for millions of American and Soviet citizens and ensuing political, economic, and social collapse of both nations; and

Whereas, The United States and the Soviet Union now possess nuclear weapons sufficient to destroy each other many times over and to end life on earth as we know it; and

Whereas, The United States and the Soviet Union have now begun the most massive nuclear weapons build-up in history, which will add thousands of new and deadly first-strike nuclear weapons to the current arsenals at a cost of hundreds of billions of dollars to the American and Soviet people; and

FOR PHYSICIANS AND SURGEONS WITH A PART-TIME EXPOSURE ONLY

Now offering Medical Malpractice Insurance on an ***occurrence basis*** at drastically reduced rates thru Frontier Insurance Co., Monticello, NY.

With the tail on claims made policies, you might lose your shirt.

Call or write for further information and application.

MEDICAL
MQ
QUADRANGLE

Medical Quadrangle, Inc.
P. O. Box 456
318 Bedford Road
Bedford Hills, New York 10507
914 666-0170
212 829-3654
"Specializing in Medical Liability Insurance"

Whereas, The future of our nation and of all civilization, may depend upon the ability of the government of the United States and the government of the Soviet Union to reach an agreement by which they would jointly freeze, then swiftly reduce their nuclear arsenals;

Now, therefore, in the interest of national and international security, be it

Resolved, That the undersigned call upon the President of the United States to propose to the leaders of the Soviet Union that together, both countries adopt an immediate, mutual freeze on the testing, production and deployment of nuclear weapons, and of missiles and new aircraft designed primarily to deliver nuclear weapons, as an essential verifiable first step toward lessening the risk of nuclear war and reducing the nuclear arsenals of both nations; and be it further

Resolved, That a copy of this resolution be transmitted to our elected officials at the local, state, and federal levels, and that they be asked to endorse it.

The Associated Medical Schools is a non-profit organization representing twelve New York medical schools. Nearly 10 % of the nation's physicians and surgeons are trained annually in New York State.

Facts, Figures, and Fillers

A study done for the National Center for Health Services Research reports that, despite a rapid increase in the doctor supply nationally, one for every 578 persons compared with one for every 840 in 1960, growth ramsins slow in counties with populations between 10,000 and 25,000. In such rural areas there's just one doctor for every 1,763 persons, compared with one for every 1,765 in 1960; and counties with populations under 10,000 now have fewer doctors per person than they did then. **ISMA Reports.**

The average malpractice award against doctors is about two and a half times what it was in 1975, but awards against hospitals are five times higher. In cases where doctors and hospitals are co-defendants, awards have nearly tripled. About 30% of the awards against hospitals and hospital-doctor co-defendants are $500,000 or more, but just 17% of the awards against doctors are that high.

Jury Verdict Research, Inc.

General Motors (64) spent an average of $3,270 per employee in health insurance premiums last year, or double the 1976 outlay. GM estimates that its health-care bill added about $370 to the cost of producing a car in 1981.

Time

National Health Expenditures, 1965–1981. Spending totals include public and private outlays, and are also shown as a percentage of the gross national product (GNP).

	Total spending (in billions)	Spending per person	Spending as % of GNP
1965	$ 41.7	$ 211	6.0%
1967	51.3	254	6.4
1969	65.6	318	7.0
1971	83.3	394	7.7
1973	103.2	478	7.8
1975	132.7	604	8.6
1977	169.2	755	8.8
1979	215.0	938	8.9
1981	286.6	1,225	9.8

Department of Health & Human Services

Recent trends in physician liability claims and insurance expenses

The increasing frequency of physician liability claims and growth in size of awards led to a crisis in the physician liability insurance market in the mid-1970s. Physicians' premiums soared and many found themselves without insurance as the companies they had been dealing with withdrew from the market. By the end of 1976 physician liability insurance was accessible again, but the level of average premiums had risen 131 percent over 1973 levels.

This report summarizes physicians' experience with professional medical liability with special emphasis on:

- changes in the average annual incidence of claims since 1976 compared to earlier years; and
- changes in the distribution of medical liability insurance expenses among physicians since 1976.

The data are from the 1982 core survey of the AMA's Socioeconomic Monitoring System. The survey, conducted in the second quarter of 1982, consisted of interviews with 3,817 physicians from a sample representative of the population of nonfederal patient care physicians, excluding residents.

1982 Survey shows strong public and physician opinion on medical care

The American Medical Association today released the results of two separate surveys of physician and public opinion on key health care issues. Taken in August of this year, the physician study, based on telephone interviews with 1,000 randomly selected physicians, was conducted. The public survey, included telephone interviews with 1,504 randomly chosen residents of the U.S.

In answer to an open-ended question about the main problem facing medicine today, physician and public respondents said "cost" substantially more often than a year ago. For physicians, cost-related responses were up fourteen points from 44% in 1981 to 58% this year. Corresponding statistics in the public study were 55% and 62%. Cost-related answers dominate all other responses in both surveys.

Concern over the current and future supply of physicians in the U.S. continues among both policymakers and the general public. A lengthy government report predicted major surpluses of physicians in certain specialties by the turn of the century. In contrast, a recent national survey (UPI, 10-26-82) concluded that health care in small communities is in jeopardy and may deteriorate in the future.

The AMA's 1982 studies show sharply divergent views among physicians and the public on this issue. Public opinion shows 38% stating that there are *not* enough doctors at present, while only 7% believe there are too many physicians. In contrast, 41% of physicians feel current supply is too high and 6% view the number of physicians in their community as too low. These findings, which are almost exactly opposite, suggest that the public sees a strong need for more doctors despite major increases in physician supply during the last decade.

Are physicians facing competition for patients from new sources? Survey data indicate that the number of hospital facilities devoted largely to providing non-emergency outpatient care is rising rapidly. This year more than three of every four physicians polled said that the proportion of health services provided by hospital outpatient services/clinics in their community has increased in the past few years.

Turning to the public, one in four Americans indicated that they had obtained medical care from hospital facilities for non-emergency problems in the past year. While there is a slight tendency for these individuals to be young and nonwhite, use of hospital outpatient services is spread fairly evenly across all demographic categories. This represents a marked change from earlier perceptions of the "clinic" as a facility dispensing care primarily to disadvantaged population groups.

Since 1978, AMA surveys have examined public satisfaction with various aspects of their last visit to a physician. These include treatment by staff, doctor's explanations, wait time in the office, wait time for an appointment, medical care received, and overall satisfaction. In 1982, satisfaction with every aspect was increased over previous years. The two largest gains, each up 8% since 1978, were for wait time in the office and wait time to get an appointment. These two aspects are those that might be expected to benefit most from an increase in the number of physicians. This follows from the fact that more doctors in a community ease patient appointment backlogs and allows the physician to schedule office visits more effectively thus reducing wait time in the office. At the same time, staff members are less harried and interactions with patients are improved. In addition, the physician may have more time to explain diagnoses and treatments to patients, thereby improving satisfaction in this area.

The American public is becoming increasingly aware of problems created by the current legal system as it relates to medical liability claims and judgments. Much of the public's concern is undoubtedly related to a growing awareness that the costs of professional liability insurance to physicians are, at least in part, passed on to patients and thus contribute directly to medical care costs.

In terms of how justified most claims are, public opinion is fairly split with 47% indicating that most claims are justified while 43% agree that most people who sue their physician are just looking for an easy way to make money.

On the issue of the size of awards, however, public opinion shifts. Fully 61% of public respondents support a limit on the amount of awards and 47% state that current awards are too high. In contrast, only 7% believe current awards are too low.

When differences between various groups are examined, an even stronger pattern of opinion emerges among the elderly. For those aged 65 or over, only 26% believe most claims are justified, 75% support a limit, and 54% indicate that current awards are too high. This set of opinions fits well with the concern over medical care costs, which also tends to be higher among the elderly.

There has been a heavy emphasis recently in the popular media on personal lifestyles and their relationship to health. Exercise and diet books abound; major magazines have given cover status to the issue. In addition, a number of surveys have examined the extent of healthful behaviors such as exercise and cessation of smoking.

There are two essential components to increasing healthful lifestyles among the population. The first is a heightened understanding that health can be improved by adopting certain behaviors. The second, which is no less important, is increased motivation to change behavior after understanding is attained.

To compare the relative importance of these two elements for various behaviors, the 1982 public opinion survey first asked respondents if they believed a certain lifestyle was related to health. If they said yes, respondents were then polled as to whether or not they had actually changed their behavior accordingly. Most of the 44% of Americans who consume large amounts of fatty red meat and dairy products do so because they are unaware of a relationship between this behavior and health. A similar pattern occurs for excessive consumption of alcohol. In contrast, the group of Americans who don't exercise, increase fiber and bulk intake, reduce smoking, or lose weight is heavily dominated by people who know their behavior is not healthy but continue it anyway. These results, while preliminary in nature, are provocative in terms of the extent to which a certain behavior may be changed by educational vs. motivational techniques.

While only one in four Americans indicated that they had seen any physician advertising (other than phone book listings), public respondents gave opinions toward possible future increases in this activity. A series of agree/disagree statements were asked and results show a mixed pattern. The public tends to believe that advertising by physicians:

- —is ethical and proper (64%)
- —will increase competition for patients (66%)
- —will not reduce physicians' professionalism (68%)
- —will help people to choose a physician (62%)
- —will not affect existing patient's opinions (66%)
- —is not a sign of unsuccessful practice (70%)

In a more negative vein, the public believes that advertising:

- —will not be done by "good doctors" (49%)
- —will not reduce fees (58%)

By Their Crests Ye Shall Know Them
Wear the MSSNY logo with pride!

These hand-embroidered, gold bullion emblems are available for purchase to our members at $15.00.

Purchasing Department
Medical Society of the State of New York
420 Lakeville Rd., P.O. Box 5404, Lake Success, N.Y. 11042

Please send ______ MSSNY crest(s). Amount enclosed $__________

Name______________________________
Please print

Address______________________________

City______________State______________Zip______________

- —will not promote better physician-patient relations (70%)
- —will not be truthful and honest (58%)

Attitudes among the elderly (those aged 65+) are sharply more negative than those of younger respondents.

Respondents were asked to rate the importance of various factors that might affect their choice of a physician if they had no regular doctor. These factors and the percentage of the public rating it very important are as follows:

- —recommendations of friends and relatives (63%)
- —doctor's fees compared to others in the area (38%)
- —doctor's qualifications and training (89%)
- —advertising that tells you about the doctor (19%)
- —length of time before you can see the doctor (74%)

As indicated, fees and advertising received the lowest ratings. Fee comparisons were also viewed as relatively unimportant to keeping a regular physician. Length of time to get an appointment figured heavily in both the initial choice and retention decisions. In another part of the survey, public approval of various changes in health care to help control cost was measured. One possible change — having to wait longer to get an appointment — was overwhelmingly rejected. Clearly, length of time for an appointment is a major factor affecting decisions to utilize the health care system.

Medical Meetings

Material for inclusion in the medical meetings section must be received eight weeks prior to publication date.

ACC Learning Center

Spring 1983 schedule of meetings to be held at their Learning Center, Bethesda, Md. For further information contact: Ronald J. Sanchez (301) 897-5400

February 2–4
Pediatric Electrocardiography and Electrophysiology: The Unknown Approach
Program Co-Directors: Paul C. Gillette, M.D., F.A.C.C., and Arthur Garson, Jr., M.D., F.A.C.C.

February 7–9
Nuclear Cardiology
Program Director: James T. Willerson, M.D., F.A.C.C.

February 14–16
Rehabilitation of the Coronary Patient
Program Director: Nanette K. Wenger, M.D., F.A.C.C.

February 23–25
Cardiac Auscultation and Physical Diagnosis for Nurses
Program Co-Directors: George S. Rebecca, M.D., and James J. Leonard, M.D., F.A.C.C.

March 2–4
Clinical Pharmacology and Electrophysiology of Antiarrhythmic Drugs
Program Director: Michael R. Rosen, M.D., F.A.C.C.

March 7–9
Diagnosis and Management of Arrhythmias for Nurses
Program Director: Marvin Dunn, M.D., F.A.C.C.

April 6–8
Current Applications of Echocardiography: M-Mode, 2-Dimensional and Doppler Techniques
Program Director: Pravin M. Shah, M.D., F.A.C.C.

April 13–15
Valvular Heart Disease: Current Controversies in Patient Management
Program Director: Shahbudin H. Rahimtoola, M.D., F.A.C.C.

April 20–22
Advanced Concepts in Pacing
Program Director: Victor Parsonnet, M.D., F.A.C.C.

CME 83

MEDICAL PRACTICE IN THE NUCLEAR AGE

These Professors and other outstanding speakers will be at the Medical Society of the State of New York's 1983 Annual CME Assembly, May 13–15, at the Rye Town Hilton.

◆

Harold L. Atkins, M.D.
Professor of Radiology and Director of Nuclear Medicine, State University of New at Stony Brook. *Annihilation, Coincidences and Scintillation: The Application of Nuclear Energy to the Diagnostic Process*

Victor P. Bond, M.D.
Associate Director for Life Sciences and Safety, Brookhaven National Laboratories, Upton. Professor of Medicine, State University of New York at Stony Brook. *Health Effects of Low Level Ionizing Radiation*

Alexander Leaf, M.D.
Chairman, Department of Preventive Medicine and Clinical Epidemiology and Ridley Watts Professor of Preventive Medicine, Harvard Medical School, Boston, Massachusetts

Francis L'esperance, M.D.
Associate Professor of Clinical Ophthalmology, Columbia University College of Physicians and Surgeons, New York City. *Ophthalmic Lasers: Instrumentation and Applications*

Richard Satran, M.D.
Professor of Neurology, University of Rochester School of Medicine and Dentistry, Rochester. *Vascular Headache: Migraine and Cluster Headache Syndromes*

Bennett M. Stein, M.D.
Byron Stookey Professor of Neurological Surgery, Columbia University College of Physicians and Surgeons; Director of Neurological Surgery, Columbia-Presbyterian Medical Center, New York City. *Surgical Treatment of Medial Hemispheric AVM's* (*Arterio Venous Malformations*)

Joseph P. Whalen, M.D.
Professor and Chairman, Department of Radiology, Cornell University Medical College; Radiologist and Chief, The New York Hospital, Cornell Medical Center, New York City. *Computerized Tomography of the Chest*

Lawrence A. Yannuzzi, M.D.
Surgeon Director in Ophthalmology, Manhattan Eye, Ear and Throat Hospital; Associate Clinical Professor of Ophthalmology, Cornell Medical School, New York City. *Krypton Laser Photocoagulation for Retino-Vascular and Macular Diseases*

◆

A highlight of the Assembly will be the General Session entitled "Medical Implications of the Nuclear Age". The 2½ days of Scientific Meetings will provide the individual physician with 18 credits out of a total of 75 Category I CME Credits being offered. Over 100 outstanding speakers, including 20 from out of state, will present papers at 26 sessions. Also, each program is acceptable for prescribed or personal interest credits by the American Academy of Family Physicians. See this issue of the Journal for the pre-registration form.

SCHEDULE OF SCIENTIFIC MEETINGS

1983 ANNUAL CME ASSEMBLY

Medical Society of the State of New York
Rye Town Hilton, Port Chester, New York

FRIDAY, MAY 13

Morning: 9–12 GENERAL SESSION—"MEDICAL IMPLICATIONS OF THE NUCLEAR AGE".

Afternoon:
- Chest Diseases
- Dermatology & Syphilology
- Gastroenterology & Colon & Rectal Surgery/Radiology
- Medical Legal & Workers' Compensation/Occupational Medicine
- Neurology

SATURDAY, MAY 14

Morning:
- Cardiovascular Diseases
- Emergency Medicine/Anesthesiology/Psychiatry/Preventive Medicine/Family Practice
- Internal Medicine/Hand Surgery
- Neurosurgery
- Ophthalmology
- Surgery
- Urology/Radiology

Afternoon:
- Emergency Medicine/Anesthesiology/Psychiatry/Preventive Medicine/Family Practice (*cont'd*)
- Internal Medicine/Hand Surgery (*cont'd*)
- Ophthalmology (*cont'd*)
- Otolaryngology—Head & Neck Surgery
- Medical Liability Mutual Insurance Co. & MSSNY
- Pathology
- School Health/Orthopedic Surgery

SUNDAY, MAY 15

Morning:
- Allergy & Immunology
- Obstetrics & Gynecology/Pediatrics
- Plastic, Reconstructive, and Maxillofacial Surgery
- Physical Medicine & Rehabilitation
- Women's Medical Society of New York State

■

CME CREDITS: Each program will be eligible for CME Catogory 1 credits on an hour-for-hour basis.

■

TECHNICAL EXHIBITS

THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

Annual CME Assembly

Friday, May 13—Sunday, May 15, 1983

Medical Practice in the Nuclear Age

All physicians are invited to attend our Annual Continuing Medical Education Program to be held at the Rye Town Hilton. You will have the opportunity to acquire Category I CME Credits during 2½ days of outstanding General Sessions, Symposia, and Panel Discussions. Highlighting the Assembly, will be the General Session entitled "Medical Implications of the Nuclear Age." Our meetings are designed to inform the physician of the latest developments not only in ones' specialty, but in other areas of medicine as well.

Each morning before the meetings begin, registrants will have the opportunity to converse with their colleagues over coffee and Danish—compliments of the Medical Society of the State of New York. There will be Technical Exhibits on display to acquaint the physician with new products and services that will help in providing better medical care. Come join your friends and colleagues in a relaxed setting.

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at the

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Outdoor tennis, heated indoor tropical garden pool, Jacuzzi whirlpool bath, sauna, and electronic game rooms. Golfing privilege 5 minutes away at one of Westchester's classic championship golf courses.

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Front Office Manager
Rye Town Hilton
699 Westchester Ave.
Port Chester, N.Y. 10573

Phone:
914-939-6300

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For more than 2 rooms, contact reservation Mgr.

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DOUBLE/TWIN:	$87	$92	$97	$102	$107
SUITES:	$185 and up				

MEDICAL SOCIETY OF THE
STATE OF NEW YORK
1983 CME ASSEMBLY
MAY 13–15, 1983
SUITES ON REQUEST TO HOTEL

☐ CONFIRMATION REQUESTED
If two or more to occupy room, name of joiner(s)

____

If a range of rates is offered and the rate requested is not available, the next available rate will be assigned. Reservation requests must be received no later than April 20, 1983, and will be held until 6:00 p.m. on the date of arrival unless otherwise specified.

If reservations are made by telephone, you must identify the Medical Society meeting for the special rate to apply. Rates subject to applicable sales tax.

RESTAURANTS

Penfield's for gracious dining—an adventure in gourmet food. Also the Tulip Tree for casual meals and buffet in a cheerful setting.

GUEST ROOMS

Each has color TV with AM/FM radio, refrigerator and coffee maker. Rooms are beautifully appointed with large windows overlooking the wooded grounds and gardens.

HOTEL RESERVATIONS

Physicians must make their own hotel reservations no later than April 20, 1983. If making reservations by telephone, please identify the Medical Society meeting for special rate to apply.

AMPLE PARKING

TRANSPORTATION

Convenient regularly scheduled ground transportation is available from LaGuardia and Kennedy Airports. On arrival, go to the baggage claim area and look for Airport Transportation Services free courtesy phone (it's red). From airports, service is throughout the day and evening with departures every hour (½ hour service during peak travel times). Last departure leaves Kennedy at 11:30 p.m. and LaGuardia at 11:45 p.m. Current one-way fare: $11.00; round trip fare: $21.00.

By train from Manhattan (Grand Central Station), take the New Haven line to Rye, New York (about 45 minutes). From the Rye Station, it is a 5 minute taxi ride to the Rye Town Hilton.

FRIDAY RECEPTION

A reception for member physicians, spouses, and exhibitors will be held from 6:00 p.m. to 7:00 p.m. Compliments of the Medical Society of the State of New York.

SATURDAY RECEPTION & DINNER DANCE

All physicians and their guests are invited to attend the Medical Society dinner dance on Saturday, May 14th. An outstanding guest speaker is scheduled to appear. A reception sponsored by the Medical Society of the State of New York will

begin at 7:00 p.m. Dinner will be served at 8:00 p.m. $40.00 per person.

MEETING HOURS

Friday, May 13: 9:00 a.m.–5:00 p.m.

Saturday, May 14: 9:00 a.m.–5:00 p.m.

Sunday, May 15: 9:00 a.m.–1:00 p.m.

EXHIBIT HOURS

Friday, May 13: 8:30 a.m.–5:00 p.m.

Saturday, May 14: 8:30 a.m.–5:00 p.m.

Sunday, May 15: 8:30 a.m.–1:00 p.m.

INTERMISSIONS

Coffee & Danish, compliments of MSSNY, will be served each morning from 8:00 a.m. to 8:45 a.m. There will be morning and afternoon intermissions for coffee, and to allow time to visit the exhibits.

REGISTRATION

Registration is open to MSSNY members and their guests, nonmember physicians, medical students, and members of the allied professions. There is no registration fee. Registration hours will be: Thursday, May 12 from 4:00 p.m.–7:00 p.m.; Friday, May 13 from 8:00 a.m.–5:00 p.m.; Saturday, May 14 from 8:00 a.m.–5:00 p.m.; Sunday, May 15 from 8:00 a.m.–12:30 p.m. All meetings and exhibits will close at 1:00 p.m. on Sunday.

PRE-REGISTRATION—Your badge and dinner tickets will be held at the MSSNY Registration Desk in the Grand Ballroom.

PRE-REGISTRATION FORM

1983 Annual CME Assembly, May 13–15
RYE TOWN HILTON

Complete and mail this form to the Medical Society address as indicated below.

(please print)

☐ Allied
☐ M.D.

Name____
(last) (first) (Initial)

Address____

City & State________________________________Zip__________

Member of MSSNY: Yes______No______Specialty____________________

Note: There is no registration fee.

Saturday Reception & Dinner/Dance______tickets @ $40.00. Total__________

Please make checks payable to: Medical Society of the State of New York, clip and mail to Division of Advertising & Meeting Services, Medical Society of the State of New York, 420 Lakeville Rd., P.O. Box 5404, Lake Success, New York 11042.

Directions to the Rye Town Hilton

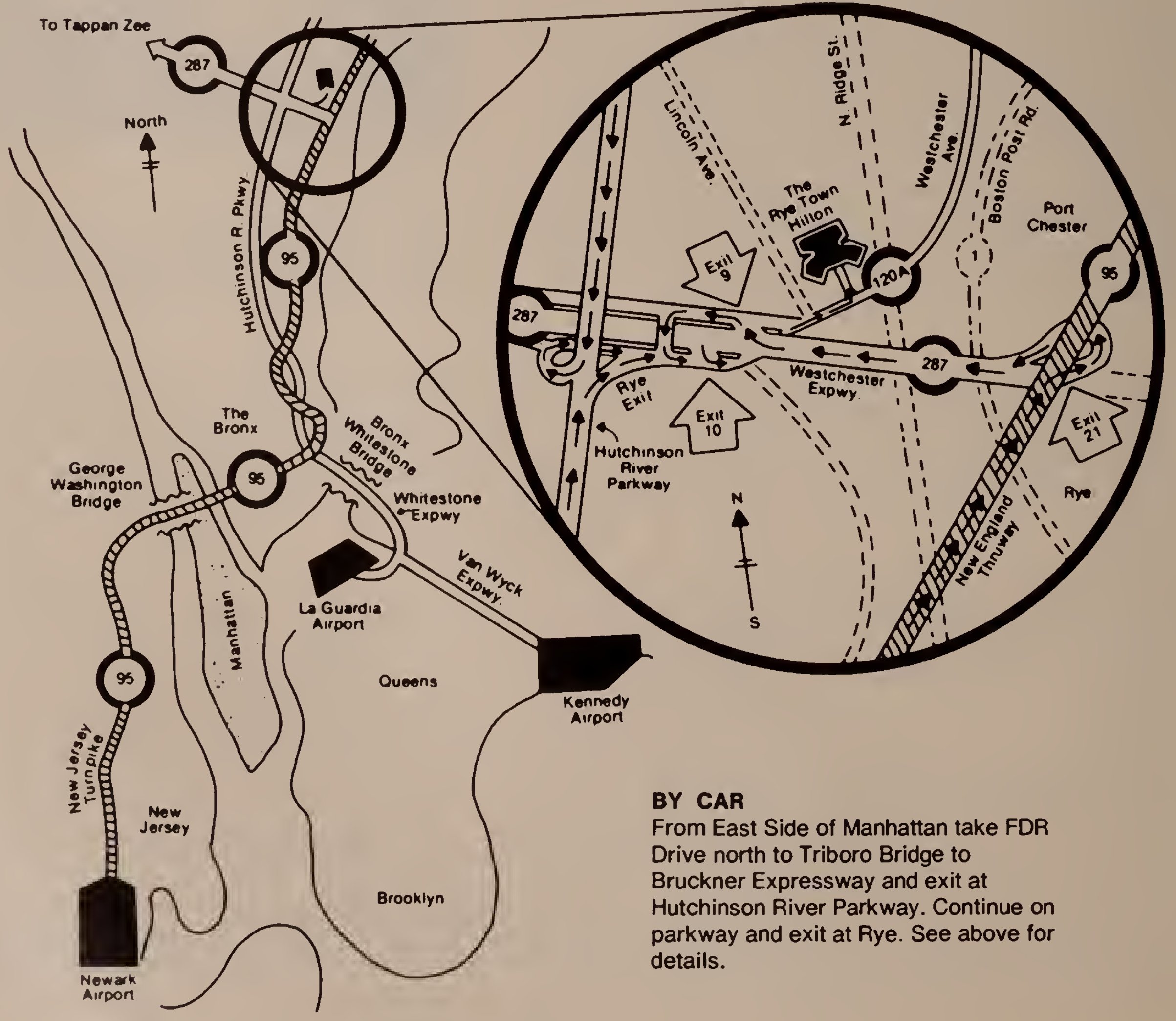
699 Westchester Avenue Town of Rye Port Chester, New York

from major New York Metropolitan Airports

FROM LAGUARDIA AIRPORT
Take the Whitestone Expressway over the Bronx-Whitestone Bridge. Follow signs to Hutchinson River Parkway. Proceed on Hutchinson River Parkway to the Rye Exit to Westchester Ave. (120A). Proceed east on Westchester Ave. following signs to Port Chester. Turn left at Rye Town Hilton entrance (at stop light).

FROM KENNEDY AIRPORT
Take Van Wyck Expressway to Whitestone Expressway. Proceed on Whitestone Expressway over the Bronx-Whitestone Bridge. Follow signs to Hutchinson River Parkway. Proceed on Hutchinson River Parkway to the Rye Exit to Westchester Ave. (120A). Proceed east on Westchester Ave., following signs to Port Chester. Turn left at Rye Town Hilton entrance (at stop light).

FROM NEWARK AIRPORT
Take New Jersey Turnpike (95) to the George Washington Bridge. Proceed on U.S. 95 to Cross Westchester Expressway Exit 21. Proceed west on Cross Westchester Expressway (287) to Exit 9. Turn left at first traffic light onto Kennilworth Road. Turn left immediately at second traffic light onto Westchester Ave. (120A). Proceed east on Westchester Ave., following signs to Port Chester. Turn left at Rye Town Hilton entrance (at stop light).



BY CAR
From East Side of Manhattan take FDR Drive north to Triboro Bridge to Bruckner Expressway and exit at Hutchinson River Parkway. Continue on parkway and exit at Rye. See above for details.

(continued from page 130)

April 25–27
Exercise Testing: Diagnostic and Physiologic Considerations
Program Director: Keith Cohn, M.D., F.A.C.C.

May 2–4
Pulmonary, Renal and Electrolyte Considerations in Patients With Cardiovascular Disease
Program Director: Robert G. Tancredi, M.D., F.A.C.C.

May 5–7
Nuclear Cardiology
Program Director: Daniel S. Berman, M.D., F.A.C.C.

May 11–13
Advanced Echocardiography
Program Co-Directors: Abdul J. Tajik, M.D., F.A.C.C., and James B. Seward, M.D., F.A.C.C.

May 16–18
Cardiac Rehabilitation for Nurses—An Advanced Program
Program Director: Robert F. DeBusk, M.D., F.A.C.C.

May 19–21
Conventional and New Approaches to Prevention and Treatment of Angina, Myocardial Infarction and Sudden Death
Program Director: C. Richard Conti, M.D., F.A.C.C.

May 25–27
Cardiology for the Consultant
Program Director: Elliot Rapaport, M.D., F.A.C.C.

June 1–3
Peripheral and Cerebral Vascular Disease
Program Director: John A. Spittell, Jr., M.D., F.A.C.C.

June 8–10
Two-Dimensional Echocardiographic Diagnosis of Congenital Heart Disease in Children
Program Director: Roberta G. Williams, M.D., F.A.C.C.

June 13–15
Advanced Echocardiography for Technicians
Program Director: Arthur E. Weyman, M.D., F.A.C.C.

June 20–22
Tachycardias: Mechanisms and Management
Program Director: Mark E. Josephson, M.D., F.A.C.C.

June 27–29
Present Status and Hope for the Future of Computer Electrocardiology
Program Co-Directors: Leonard S. Dreifus, M.D., F.A.C.C., and Frits L. Meijler, M.D., F.A.C.C.

ASPO 7th Annual Meeting

The Seventh Annual Meeting of the American Society for Preventive Oncology will be held on March 24–25, 1983 at the Holiday Inn, Bethesda, Md. Persons interested in this program may obtain further information from David Schottenfeld, M.D., Memorial Sloan-Kettering Cancer Center, New York City, 10021.

Information for Authors

MANUSCRIPTS. Manuscripts will be accepted for consideration with the understanding that they are original, have never before been published nor submitted elsewhere, and are contributed solely to the NEW YORK STATE JOURNAL OF MEDICINE. Original, a copy, and abstract must be included. Address manuscripts to Editor, New York State Journal of Medicine, 420 Lakeville Road, P.O. Box 5404, Lake Success, New York 11042.

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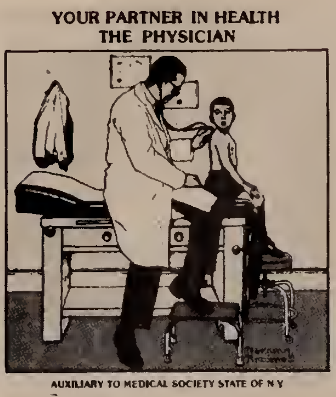
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PHYSICIANS WANTED—CONT'D

WANTED: FAMILY PHYSICIAN to teach and practice. University of Missouri-Kansas City Department of Family Practice. Residency program has 18 residents, has four other full time and four part time faculty. Suburban location. New clinic. Certification by American or Canadian Board required. Salary competitive depending upon experience. Contact Family Practice Department, University of Missouri-Kansas City School of Medicine, Truman Medical Center/East, Route 17, Kansas City, MO 64139. Attention: Thomas A. Nicholas, M.D. (816) 373-8210.

NEEMA EMERGENCY MEDICAL
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Emergency Medicine Positions—available with emergency physician group in PA, NY, NJ, VA, WVA, MD, KY and throughout New England, the Southeast, the Midwest, including all suburban, rural and metropolitan areas. Fee-for-service with minimum guarantee provided. Malpractice paid. Practice credits toward board certification. Physician department directors also desired. Please send resume to: NEEMA Emergency Medical, Suite 400, 399 Market Street, Phila., PA 19106 or phone 215-925-3511 in PA, or 800-523-0776 outside PA.

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CVPH Medical Center, a progressive 450 bed university affiliated hospital located in northeastern New York State, is seeking a qualified and New York State licensed physician to work full time in the Emergency Department. The Medical Center is located in an attractive college community on Lake Champlain near the Adirondack Mountains, Lake Placid and Montreal. Excellent salary, benefits and schedule are offered. Send curriculum vitae to: Mr. David T. Hannan, President, CVPH Medical Center, 100 Beekman Street, Plattsburgh, N.Y. 12901.

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PRACTICES WANTED

RADIOLOGIST, NUCLEAR MEDICINE Physician seeking hospital group or partnership. Available: November 1982—Board Eligible. Valery Kalika, M.D., 89-16 Doran Avenue, Glendale, N.Y. 11385. Tel. (212) 896-1406.

GENERAL PRACTITIONER wants to relocate and buy a viable general practice in Nassau County or western Suffolk County. Reply Dept. 257, c/o NYSJM.

EQUIPMENT

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LARGE SOLO PSYCHIATRIC practice—17 years same location—accessible all Long Island Hospitals. Will introduce. Home-office in exclusive central Nassau. 11 rooms, including apt. 2nd floor, 4½ baths, 3 fireplaces, 2½ car garage, breezeway, bluestone patio, brick and stone Ranch. Call (516) 626-2811.

WELL ESTABLISHED 30 YEAR PLUS Medical office for sale. Initial 1–2 year partnership, certified ABIM a pre-requisite for hospital affiliation. Please send condensed resume to Dept. 273, c/o NYSJM.

ESTABLISHED FAMILY PRACTICE available. Fully equipped. Beautiful residential area. South Shore Long Island. 5 minutes to hospital. Terms negotiable. (516) 289-0585.

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IF YOU OWN A MEDICAL BUILDING conversion to Professional Condominium gives you tremendous after-tax profits while controlling ownership of your office location. Learn how you can profit from our concept. Contact: Paul Gellert, Gelco Associates, 155 West 68th Street, New York, N.Y. 10023. Phone: (212) 223-1130.

ASSOCIATES IN MEDICINE, FAMILY PRACTICE, pediatrics, etc., to share new professional building in Litchfield, Conn. We have a catchment population of about 20,000 people, and presently only one medical man here with hospital privileges. Excellent opportunity for any practitioner who desires a fast start. Please contact Dr. George Carofino (203) 567-9488 or (203) 482-9481.

AT KINGS PLAZA BROOKLYN (Flatbush Ave. and Ave. U). Space available in prestigious luxury medical building—nine hundred (900) sq. ft. of ideally laid out functional office space with public transportation to the front door from any location in Brooklyn, convenient parking, computerized axial tomography (cat scanner) and radiology lab within walking distance. Excellent patient referrals from large general medicine practice within the building. Call owner (212) 287-5013 or (212) 338-0400.

WESTCHESTER COUNTY—NORTH SALEM. Unique converted barn with large adjoining office facility on two wooded acres in affluent area. Beautiful living and excellent working space for physician. Close to highways 684 and I-84. Additional five acres with in-ground swimming pool available. (201) 567-7949 or (914) 669-9618.

FOR SALE—PHYSICIANS MEDICAL BUILDING, Hempstead Turnpike, Bethpage, near major hospitals and expressways, plot 135′ × 170′, building 3752 sq. ft., parking 40 cars, excellent terms, call (516) 293-3700.

MANHATTAN DOCTOR'S OFFICE near Mt. Sinai and St. Luke's Hospitals and Columbia University. 110 Street near Riverside Drive. Available after 20 years of occupancy. Ground floor front. Approximately 650 square feet. Luxurious, high-rise residential building with 24-hour doorman. Call weekdays, 9am–1pm, (212) 222-0309.

GREENWICH VILLAGE, N.Y.: La Guardia Place and W. 3rd, opposite N.Y.U. houses—New hi rise bldg., units 800′–12,000′ new installations, street level and 2nd floor. Helmsley-Spear, Inc. Call A. Schonfeld at (212) 880-0435 or P. Hewitt at (212) 880-0180.

HILTON HEAD, S.C.—3 bedroom furnished Condo on Ocean with two balconies, available for one week April 2, 1983–April 9, 1983. Tennis courts and pools no charge—golf courses available. Interested individuals only. Price $850.00. Call (212) 822-1152, M-W-F between 2 & 3 p.m. or write Dept. 274, c/o NYSJM.

what goes on
IN
CONTINUING MEDICAL EDUCATION

NEW YORK STATE **FEBRUARY 1983**

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Please send information to the Editor, WHAT GOES ON,
420 Lakeville Road, Lake Success, New York 11042
Telephone 516-488-6100.

Compiled by the Division of Scientific Activities
George J. Lawrence, Jr., M.D., Director
Mrs. Tina Koty, Editor
Philip Keating, Director, Division of Finance

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NEW YORK

Albert Einstein College of Medicine of Yeshiva University Department of Surgery

1300 Morris Park Avenue
Bronx, NY 10461
* Van Etten Hospital—Room 523
February 4, 1983—4:00-5:30 PM
ONCOLOGY FOR THE FAMILY PRACTITIONER
LYMPHOMAS
B. H. Kaplan, M.D.
February 18, 1983—4:00-5:30 PM
ONCOLOGIC EMERGENCIES—RADIOTHERAPIST'S VIEWPOINT
A. Abitbol, M.D.
CREDIT: AAFP Cat. 1
For further information contact Margot L. Wulf, Admin. Secy. to Dr. Herbert Volk, Albert Einstein College of Medicine of Yeshiva University. Tel: 212/430-2000.

Beth Israel Medical Center Co-Sponsored by The Page and William Black Post-Graduate School of the Mount Sinai School of Medicine, CUNY

10 Nathan D. Perlman Place
New York, NY 10003
* Podell Auditorium, Beth Israel Medical Center
February 11, 1983—Friday—9:00 AM-4:00 PM
ALLERGIC, IMMUNOLOGICAL AND ENVIRONMENTAL INFLUENCES ON LUNG DISEASE
James M. Rubin, M.D. & Stuart H. Young, M.D.
CREDIT: AMA Cat. 1 (7 Hrs.)
For further information contact Kathy R. Bonomo, Beth Israel Medical Center. Tel: 212/420-2000.

The Jewish Hospital and Medical Center of Brooklyn in association with the American Cancer Society, New York Division, Brooklyn Unit, SUNY, Downstate Medical Center, Sponsored by the Division of Hematology/Oncology

555 Prospect Place
Brooklyn, NY 11238
* B-51 Conference Room, Basement, Leviton Bldg.
February 9, 1983—3:30-4:30 PM—Wednesday
ADVANCES IN HEMATOLOGY AND ONCOLOGY
MULTIMODALITY APPROACH—CARCINOMA OF THE COLON, RECTUM & ANUS—RADIOTHERAPEUTIC PERSPECTIVES
Marvin Rotman, M.D.
February 16, 1983—3:30-4:30 PM—Wednesday
COMBINED TREATMENT OF ADVANCED HODGKINS DISEASE
Sameer Rafla, M.D.
February 23, 1983—3:30-4:30 PM—Wednesday
HLADR & DISEASE ASSOCIATIONS
Marilena Fotino, M.D.
CREDIT: AMA CAt. 1
For further information contact the Jewish Hospital and Medical Center of Brooklyn, 555 Prospect Place, Brooklyn, New York 11238. Tel: 212/240-1211.

The Page and William Black Postgraduate School of Medicine of the Mount Sinai School of Medicine (CUNY)

One Gustave L. Levy Place
New York, NY 10029
* Mount Sinai Medical Center
February 14-18, 1983—Monday-Friday—8:00 AM-5:00 PM (each day)
HEAD AND NECK SURGERY
Hugh F. Biller, M.D.
FEE: $1200.000. CREDIT: AMA Cat. 1 (40 Hrs).
February 12, 1983—9:00 AM-4:00 PM
ORTHOPAEDICS PM 283—THE SATURDAY MORNING GRAND ORTHOPAEDICS SYMPOSIA
Victor H. Frankel, M.D.
CREDIT: AMA Cat. 1
* Union Health Center, New York, NY
February 2, 1983—Wednesday—7:30-9:30 AM
MOUNT SINAI TEACHING DAYS
GASTROENTEROLOGY UPDATE
Mark L. Chapman, M.D.
February 9, 1983—Wednesday—7:30-9:30 AM
MENORRHAGIA AND METRORRHAGIA
Nathan G. Kase, M.D.
February 16, 1983—Wednesday—7:30-9:30 AM
HEMORRHAGIC DISORDERS
Louis M. Aledort, M.D.
February 23, 1983—Wednesday—7:30-9:30 AM
LYMPHONAS AND HODGKINS DISEASE
Janet Cutter, M.D.
CREDIT: AMA Cat. 1

Saint Mary's Hospital of Brooklyn Department of Medicine

170 Buffalo Avenue
Brooklyn, NY 11213
* Third Floor—Board Room
February 2, 1983—Wednesday—8:00 AM-9:00 AM
DISGUISES OF INFLAMMATORY BOWEL DISEASE
Seymour Katz, M.D.
CREDIT: AMA Cat. 1
February 9, 1983—Wednesday—8:00 AM-9:00 AM
MEDICAL TREATMENT OF GALLSTONES
Gerald Salen, M.D.
February 16, 1983—Wednesday—8:00 AM-9:00 AM
MOTOR DYSFUNCTIONS OF ESOPHAGUS
Swaminath Tyer, M.D.
February 23, 1983—Wednesday—8:00 AM-9:00 AM
DIARRHEA MECHANISMS—DIAGNOSIS AND THERAPY
Prem Misra, M.D.
For further information contact the Department of Medicine at St. Mary's Hospital—774-3600, Ext. 2044 or 2045.

The Edward S. Harkness Eye Institute at Columbia-Presbyterian Medical Center

635 West 165th Street
New York, NY 10032
February 1, 1983 to April 29, 1983—8:00 AM-9:00 AM Daily
PART III—REVIEW OF BASIC & CLINICAL SCIENCE COURSES OF THE AMERICAN ACADEMY OF OPHTHALMOLOGY IN PREPARATION FOR OKAP EXAMS
FEE: $300.
For further information contact Alice B. McBride, 635 West 165th Street, New York. Tel: 212/694-2725.

SUNY Downstate Medical Center Kings County Hospital Center in cooperation with District 1, NYSSA

Department of Anesthesiology
450 Clarkson Avenue
Brooklyn, NY 11203
February 1, 1983—8:00-9:00 PM

VISITING PROFESSOR PROGRAM
ALLERGIC REACTIONS DURING THE PERIOPERATIVE PERIOD
Robert K. Stoelting, M.D.
February 7, 1983—4:00–5:00 PM
THE CHEMISTRY OF NEUROMUSCULAR TRANSMISSION
Richard J. Kitz, M.D.
February 8, 1983—5:00–6:00 PM
AN ANALYSIS OF 'NEAR MISSES' IN ANESTHESIA PRACTICE
CREDIT: AMA Cat. 1
For further information contact Abraham I. Raskob, M.D., SUNY Downstate Medical Center, 450 Clarkson Avenue, Brooklyn, NY 11203. Tel: 212/270-1233.

The Page and William Black Postgraduate School of Medicine of the Mount Sinai School of Medicine (CUNY)

One Gustave L. Levy Place
New York, NY 10029
* Central General Hospital, Plainview, NY
February 2, 1983—Wednesday—12 NOON–1:00 PM
MOUNT SINAI TEACHING DAYS
PERIPHERAL VASCULAR DISEASE
Harry R. Schanzer, M.D.
CREDIT: AMA Cat. 1
* Long Beach Memorial Hospital
February 8, 1983—Tuesday—4:00–6:00 PM
DIABETES
Milton J. Brothers, M.D.
CREDIT: AMA Cat. 1

Long Island Jewish-Hillside Medical Center

New Hyde Park, NY 11042
* Grand Hyatt Hotel, New York City
February 1, 1983
1983 REGIONAL CME MEETINGS
AMERICAN COLLEGE OF PHYSICIANS
For further information contact Arthur W. Feinberg, M.D., North Shore University Hospital, 300 Community Drive, Manhasset, NY 11030.

Medical Society of the County of Kings and The Academy of Medicine of Brooklyn, Inc.

1313 Bedford Avenue
Brooklyn, NY 11216
February 6, 1983—Sunday—9:00 AM–2:25 PM
MANAGEMENT OF PAIN
Morris J. Kleinfeld, M.D.
Asa P. Ruskin, M.D.
CREDIT: AMA Cat. 1 (4 Hrs.)
For further information contact Hazel Spadafora, Medical Society of the County of Kings and The Academy of Medicine of Brooklyn, Inc. Tel: 212/467-9000.

Doctors Hospital

170 East End Avenue
New York, NY 10028
February 3, 1983—Thursday—4:15 PM
CARDIOVASCULAR DISEASES IN CLINICAL PRACTICE
CLINICAL LECTURES—VALVULAR HEART DISEASE
Michael V. Herman, M.D.
CREDIT: AMA CAt. 1 (1½ Hrs.)
For further information contact Secretary of Continuing Medical Education, Doctors Hospital. Tel: 212/870-9118.

American College of Physicians

4200 Pine Street
Philadelphia, PA 19104
* Grand Hyatt Hotel, New York City
February 1, 1983—Tuesday—
NEW YORK PHYSICIANS TO GATHER TO UPDATE MEDICAL KNOWLEDGE
For further information contact Arthur W. Feinberg, M.D., Dept. of Medicine, North Shore Community Hospital, 300 Community Drive, Manhasset, NY 11030. Tel: 516/562-4545.

The New York Infirmary-Beekman Downtown Hospital

170 William Street
New York, NY 11038
* Board Room—Second Floor
February 25 & 26, 1983—Friday & Saturday
ELECTRODIAGNOSIS OF PERIPHERAL NEUROLOGICAL LESIONS
Jay A. Liveson, M.D., Neil I. Spielholz, Ph.D.
FEE: $150. CREDIT: AMA Cat. 1 (13 Hrs.)
$100.—Residents
For further information contact Dr. John T. Flynn, Dept. of Medicine, NY Infirmary-Beekman Downtown Hospital, 170 Wiliam St., New York, NY. Tel: 212/233-5300, Ext. 527.

QUEENS

Peninsula Hospital Center under the Auspices of Downstate Medical Center Co-Sponsored by the Academy of Medicine County of Queens

51-15 Beach Channel Drive
Far Rockaway, NY 11691
* Perlberg Auditorium
February 6, 1983—Sunday—9:00 AM–12:00 NOON
INTENSIVE REVIEW FOR FAMILY PHYSICIANS
CARDIAC MEDICATIONS
Henry Meilman, M.D.
February 13, 1983—Sunday—9:00 AM–12:00 NOON
COMMON NEUROLOGICAL PROBLEMS
Brian Anziska, M.D.
February 27, 1983—Sunday—9:00 AM–12:00 NOON
NEPHROLOGY
Eli Friedman, M.D.
CREDIT: AMA Cat. 1 & AAFP
For further information contact Edward H. Davis, M.D., Peninsula Hospital Center. Tel: 212/945-7100, Ext. 377.

Queens Hospital Center Affiliation of Long Island Jewish-Hillside Medical Center Department of Psychiatry

82-68 164th Street
Jamaica, NY 11432
* School of Nursing, Queens Hospital Center
February 4, 1983—Friday—11:00 AM–12:00 NOON
GRAND ROUNDS—THE LONG TERM EFFECTS OF BOXING ON THE BRAIN
Ozzie Siegel, Ph.D.
February 18, 1983—Friday—11:00 AM–12:00 NOON
GRAND ROUNDS—ALLOCATION OF SCARCE MEDICAL RESOURCES
Fred Rosner, M.D.
February 25, 1983—Friday—11:00 AM–12:00 NOON
GRAND ROUNDS—RECENT ADVANCES IN THE PSYCHOPHARMACOLOGIC MANAGEMENT OF AFFECTIVE DISORDERS

Ivan Goldberg, M.D.
CREDIT: AMA Cat. 1
For further information contact Philip E. Levine, M.D., Dept. of Psychiatry, Queens Hospital Center, 82-68 164 St., Jamaica, NY 11432. Tel: 212/990-3551.

Long Island Jewish-Hillside Medical Center/ Queens Hospital Center Affiliation, The Postgraduate Institute for Medical and Dental Education and the Health Sciences Center State University of New York at Stony Brook Department of Medicine

New Hyde Park, NY
* Nursing School Auditorium—Queens Hospital Center
82-68 164th Street, Jamaica, NY
February 2, 1983—Wednesday—11:00 AM-12:00 NOON
GRAND ROUNDS—PATHOPHYSIOLOGY OF RESTRICTIVE CARDIAC DISEASE
Rodney Falk, M.D.
February 9, 1983—Wednesday—11:00 AM-12:00 NOON
GRAND ROUNDS—TREATMENT OF COMPLICATED HYPERTENSION
Martin Neff, M.D.
February 16, 1983—Wednesday—11:00 AM-12:00 NOON
GRAND ROUNDS—MENOPAUSE
Fred Benjamin, M.D.
February 23, 1983—Wednesday—11:00 AM-12:00 NOON
GRAND ROUNDS—UPDATE ON INFLAMMATORY BOWEL DISEASE
Seymour Katz, M.D.
For further information contact Herbert Diamond, M.D., Chairman, Dept. of Medicine, Long Island Jewish-Hillside Medical Center, New Hyde Park, NY

Flushing Hospital and Medical Center

4500 Parsons Blvd.
Flushing, NY 11355
February 13, 1983—Sunday—9:00 AM-1:00 PM
SECOND ANNUAL REVIEW IN INTERNAL MEDICINE ONCOLOGY
Franco Muggia, M.D.
FEE: Per session: $50.00 FH&MC Staff Members
$60.00 Non-Staff Members
CREDIT: AMA Cat. 1
Department of Medicine
February 1, 1983—Tuesday—10:30 AM-12:00 NOON
GRAND ROUNDS—THE NEPHROTIC SYNDROME
Ira Greifer, M.D.
February 8, 1983—Tuesday—10:30 AM-12:00 NOON
GRAND ROUNDS—GENERALIZED RHEUMATISM RELATED TO FIBROCYTIS, POLYMYALGIA RHEUMATICA, POLYMYOSITIS AND THE NEW RHEUMATIC SYNDROMES
Peter Barland, M.D.
February 15, 1983—Tuesday—10:30 AM-12:00 NOON
GRAND ROUNDS—CANCER UPDATE: BREAST, LUNG AND COLON CANCER
Steven Vogl, M.D.
For further information contact Luisa T. Gonzalez, Coordinator, Continuing Medical Education, Flushing Hospital and Medical Center. Tel: 212/670-5741.

The Jamaica Hospital

89th Avenue & Van Wyck Expressway
Jamaica, NY 11418
* Community Room
February 3, 1983—Thursday—8:30-9:30 AM
CARDIOLOGY
NUCLEAR STRESS TESTS IN THE EVALUATION AND DETECTION OF CORONARY HEART DISEASE
Jerome H. Koss, M.D.
February 17, 1983—Thursday—8:30-9:30 AM
ANTIARRHYTHMIC THERAPY 1983
Kul D. Chadda, M.D.
February 1, 1983—Tuesday—8:30-9:30 AM
ENDOCRINOLOGY & METABOLISM
DIABETES MELLITUS—ACUTE COMPLICATIONS
Selim Baruh, M.D.
February 4, 1983—Friday—8:30-9:30 AM
MEDICAL GASTROENTEROLOGY
INFECTIOUS DYSENTERIES
Burke A. Cunha, M.D.
February 18, 1983—Friday—8:30-9:30 AM
PANCREATITIS UPDATE
Simmy Bank, M.D.
February 25, 1983—Friday—8:30-9:30 AM
SEQUENTIAL REVIEW OF LIVER HISTOPATHOLOGY, PART III
Elizabeth Khayat, M.D.
* Trump Pavilion
February 9, 1983—Wednesday—9:00-10:30 AM
ADVENTURES IN LIVERLAND
Irwin M. Arias, M.D.
* Assembly Room
February 4, 1983—Friday—12:30 PM
THE SONOGRAPHY OF JAUNDICE
Richard Schaffer, M.D.
* Community Room
February 8, 1983—Tuesday—8:30-9:30 AM
HEMATOLOGY
ABNORMALITIES OF PLATELET KINETICS
Robert Reiss, M.D.
* Trump Pavilion
February 23, 1983—Wednesday—9:00-10:30 AM
CANCER AND COAGULATION
Ralph L. Nachman, M.D.
* Community Room
February 10, 1983—Thursday—8:30-9:30 AM
INFECTIOUS DISEASES
ENDOCARITIS
Robert H. Lapin, M.D.
* Trump Pavilion
February 2, 1983—Wednesday—9:00-10:30 AM
MEDICAL GRAND ROUNDS & PROGRESS IN MEDICINE
NEWER HORIZONS IN ARTHRITIC DRUG THERAPY
Herbert S. Diamond, M.D.
February 16, 1983—Wednesday—9:00-10:30 AM
SOME UNCOMMON PULMONARY PROBLEMS
Nathan Seriff, M.D.
* Community Room
February 22, 1983—Tuesday—8:30-9:30 AM
NEPHROLOGY
DIAGNOSTIC APPROACH TO A PATIENT WITH OLIGURIA
Amarjit Singh, M.D.
February 15, 1983—Tuesday—8:30-9:30 AM
NEUROLOGY
HYPERTENSIVE ENCEPHALOPATHY
Edward B. Healton, M.D.
February 11, 1983—Friday—8:30-9:30 AM
ONCOLOGY
THYROID CANCER
Ione Kourides, M.D.
* The Assembly Room
February 25, 1983—12:30-1:30 PM
PATHOLOGY GRAND ROUNDS
CASE STUDIES IN OCULAR AND HEAD AND NECK PATHOLOGY FOR THE GENERAL PATHOLOGIST
Winston G. Harrison, M.D.
February 7, 1983—Monday—12:30-1:30 PM
PRIMARY CARE CONFERENCES—ORTHOPEDICS
THE PAINFUL SHOULDER
Irving Mauer, M.D.
February 14, 1983—Monday—12:30-1:30 PM
OFFICE ORTHOPEDICS FOR THE INTERNIST
Joseph P. Demeri, M.D.

February 28, 1983—Monday—12:30-1:30 PM
SPORTS INJURIES IN ADOLESCENTS
Ernesto Seldman, M.D.
* The Community Room
February 24, 1983—Thursday—8:30-9:30 AM
RHEUMATOLOGY
SEPTIC ARTHRITIS
Stephen Paget, M.D.
For further information contact The Jamaica Hospital, 89th Avenue & Van Wyck Expressway, Jamaica, NY. Tel: 212/657-1800.

NASSAU COUNTY

Long Beach Memorial Hospital in affiliation with The Page & William Black Postgraduate School of Medicine of The Mount Sinai School of Medicine (CUNY)

455 East Bay Drive
Long Beach, NY 11561
* Hospital Auditorium
February 8, 1983—4:00 PM-6:00 PM
DIABETES
Milton J. Brothers, M.D.
CREDIT: AMA Cat. 1
For further information call Community Relations Dept. Tel: 516/432-8000, Ext. 362 or 363.

Nassau County Medical Center

2201 Hempstead Turnpike
East Meadow, NY 11554
February 3, 1983—Thurdsay—10:00 AM
THE THIRD ANNUAL MEDICAL GRAND ROUNDS
BILIRUBIN TOXICITY, PATHOLOGIC SYNDROMES AND TOOLS FOR CLINICAL INTERVENTION
J. Roy Chowdhury, M.D.
February 10, 1983—Thursday—10:00 AM
RECENT DEVELOPMENTS IN THE TREATMENT OF EPILEPSY
B. J. Wilder, M.D.
February 17, 1983—Thursday—10:00 AM
IMMUNOBIOLOGY OF GRAM NEGATIVE INFECTIONS
Mark Kaplan, M.D.
February 24, 1983—Thursday—10:00 AM
NEW ADVANCES IN THE DIAGNOSIS AND TREATMENT OF OSTEO AND RHEUMATOID ARTHRITIS
Thomas G. Kantor, M.D.
CREDIT: AMA Cat. 1 & AAFP
For further information contact Ethel A. Ford, CME Coordinator, Dept. of Medicine, Nassau County Medical Center. Tel: 516/542-0123.

NASSAU COUNTY

Long Island Jewish-Hillside Medical Center Sponsored by The Dept. of Pediatrics, Long Island Jewish Medical Center, New Hyde Park, New York, The Postgraduate Institute for Medical and Dental Education and the Health Sciences Center, State University of New York at Stony Brook

* The Teaching Center Auditorium
Long Island Jewish-Hillside Medical Center
New Hyde Park, NY 11042
February 23, 1983 through May 25, 1983—Wed—8:00 PM-10:00 PM
13th ANNUAL PEDIATRIC BOARD REVIEW COURSE—1983
I. Ronald Shanker, M.D.

FEE:	$225.	CREDIT:	Cat. 1
	$110.	for Interns & Residents	

For further information contact Ann J. Boehme, Continuing Education Coordinator, Long Island Jewish-Hillside Medical Center, New Hyde Park, NY. Tel: 212/470-2114.

Hempstead General Hospital

800 Front Street
Hempstead, NY 11551
* Hospital Dining Room
February 12, 1983—Saturday—8:45 AM-11:00 AM
EMERGENCY DEPARTMENT LECTURE SERIES
GRAND ROUNDS—"TOXICOLOGY" AND CASE REVIEW
CREDIT: AMA Cat. 1
For further information contact Valerie Roessner, Hempstead General Hospital. Tel: 516/560-1216.

Long Island Jewish-Hillside Medical Center Sponsored by Departments of Nursing, Social Work Services and the Office of Cancer Care

New Hyde Park, NY 11042
* Room E201, A,B,C, Teaching Center Auditorium Long Island Jewish-Hillside Medical Center
January 27, 1983—Thursday—8:30 AM-4:30 PM
PSYCHOSOCIAL PRACTICE TOWARD EFFECTIVE INTERVENTION WITH THE CANCER PATIENT
Arthur Sawitsky, M.D., Abraham Lurie, Ph.D.
CREDIT: AMA Cat. 1 (6 Hrs.)
For further information contact Ann J. Boehme, Long Island Jewish-Hillside Medical Center. Tel: 212/470-2114.

SUFFOLK COUNTY

Brookhaven Memorial Hospital Medical Center

101 Hospital Road
Patchogue, NY 11772
* 1st Floor Conference Room
February 4, 1983—8:00-9:00 AM
CLINICAL PROBLEMS IN FAMILY MEDICINE
HEMATOLOGY/ONCOLOGY—NEW BLOOD PRODUCTS
Dennis Galanakis, M.D.
February 11, 1983—8:00-9:00 AM
February 11, 1983—8:00-9:00 AM
IRON METABOLISM
Mohammed Hossain, M.D.
February 18, 1983—8:00-9:00 AM
SKIN MALIGNANCIES
Lawrence Wells, M.D.
February 25, 1983—8:00-9:00 AM
IMMUNOLOGY
DISEASES IN THE GAY POPULATION
Stephen Batthany, M.D.
CREDIT: AMA Cat. 1
For further information contact Dorothy S. Lane, M.D., Brookhaven Memorial Hosp. Medical Ctr., 101 Hospital Rd., Patchogue, NY. Tel: 516/654-7795.

SULLIVAN COUNTY

The Page and William Black Postgraduate School of Medicine of the Mount Sinai School of Medicine (CUNY)

One Gustave L. Levy Place
New York, NY 10029
* Community General Hospital of Sullivan County
Harris, NY
February 8, 1983—Tuesday—4:00-6:00 PM
MOUNT SINAI TEACHING DAYS
CALCIUM CHANNEL BLOCKERS
Joel Kupersmith, M.D.
CREDIT: AMA Cat. 1

BUFFALO

Roswell Park Memorial Institute Dept. of Health—State of New York

666 Elm Street
Buffalo, NY 14263
February 19, 1983—Saturday
ONCOLOGY SEMINAR SERIES—OVARIAN CANCER: NEW APPROACHES TO THE TREATMENT OF ADULTS AND ADOLESCENTS
Dr. M. Steven Piver
FEE: $45.00—Physicians—$15.00—Residents & Allied Health Professionals
For further information contact Gayle Bersani, R.N., Roswell Park Memorial Institute. Tel: 716/845-4406.

FUTURE EVENTS

NASSAU

Long Island Jewish-Hillside Medical Center The Department of Ophthalmology

New Hyde Park, NY 11042
* Long Island Jewish-Hillside Medical Center Teaching Center
March 9, 1983—8:00 AM-4:00 PM
RETINA AND PHOTOCOAGULATION
Alan Bird, M.D., Stuart Fine, M.D., Donald Glass, M.D.
For further information contact Ann J. Boehme, Continuing Education Coordinator, Long Island Jewish-Hillside Medical Center. Tel: 212/470-2114.

The New York Academy of Medicine

2 East 103rd Street
New York, NY 10029
March 2, 1983—Wednesday—8:00-10:00 PM
SECTION ON ANESTHESIOLOGY AND RESUSCITATION
BARBARA LIPTON MEMORIAL MEETING
Nicholas M. Greene, M.D., Paul A. Radnay, M.D. & John H. Tinker, M.D.
For further information contact The New York Academy of Medicine, 2 East 103rd St., New York, NY. Tel: 212/876-8200.

Long Island Jewish-Hillside Medical Center Department of Pediatrics New Hyde Park, NY 11042 * Frenchman's Reef—St. Thomas

March 8-13, 1983—Tuesday through Sunday
THE 12th ANNUAL PEDIATRIC POSTGRADUATE COURSE
PEDIATRIC UPDATE—1983
I. Ronald Shenker, M.D.
FEE: $185. CREDIT: Cat. 1 (18 Hrs.)
For further information contact Ann J. Boehme, Long Island Jewish-Hillside Medical Center, New Hyde Park, NY. Tel: 212/470-2114.

OUT OF STATE

Long Island Jewish-Hillside Medical Center

New Hyde Park, NY 11042
* Conference Center, Williamsburg, VA
February 18-20, 1983
1983 REGIONAL CME MEETINGS
AMERICAN COLLEGE OF PHYSICIANS
For further information contact James E. Moss, M.D., 1707 Osage St., Alexandria, VA 22302.
* University of North Carolina, Chapel Hill, NC.
February 19-20, 1983
1983 REGIONAL CME MEETINGS
AMERICAN COLLEGE OF PHYSICIANS
For further information contact Joseph E. Johnson, III, M.D., 3500 Quarterstaff Pl., Winston-Salem, NC 27104.

Buffalo General Hospital State University of NY at Buffalo Cardiac Study Fund

Box 114, Hiler Branch
Buffalo, NY 14223
* Sheraton Boca Raton, Florida
February 12-23, 1983
CARDIAC AUSCULTATION
February 24-26, 1983
ACUTE PROBLEMS IN PRACTICE
For further information contact Cardiac Study Fund, Box 114, Hiler Branch, Buffalo, NY. Tel: 716/836-5172.

Children's Hospital National Medical Center

111 Michigan Avenue, N.W.
Washington, DC 20010
* La Concha Hotel, San Juan, Puerto Rico
February 17-21, 1983
PEDIATRICS IN PUERTO RICO: THE TENTH ANNUAL PEDIATRIC SYMPOSIUM OF CHILDREN'S HOSPITAL NATIONAL MEDICAL CENTER
For further information contact Susan Weiss, Convention Services, Children's Hospital National Medical Center, 111 Michigan Ave., N.W., Washington, D.C. Tel: 202/745-3000.

OUT OF STATE

SUNY—Upstate Medical Center

776 Irving Avenue
Syracuse, NY 13210
* Miramar Mission, Cancun, Mexico
February 28-March 7, 1983
INTRODUCTORY EKG WORKSHOP FOR PRIMARY CARE PHYSICIANS
CREDIT: Cat. 1 FEE: $395.
For further information contact Betty Frost, Upstate Medical

Center, 766 Irving Ave., Syracuse, NY. Tel: 315/473-4606.

The International Association for Human Relations Laboratory Training

Box 233—Kensington Station
Brooklyn, NY 11218
* Barbados
February 12–19, 1983 and February 19–26, 1983
INTERNATIONAL OCCUPATIONAL ENRICHMENT HUMAN RELATIONS CONFERENCES
For further information contact Human Relations Inter-Group, Conference Reservation Center, 30 East 42 St., New York, NY 10017. In USA Toll Free: 800/221-1255, in NY State: 212/697-1191.

FUTURE EVENTS

OUT-OF-STATE

Association for the Care of Asthma, Inc.

P.O. Box 568—Spring Valley Road
Ossining, NY 10562
* Diplomat Hotel, Hollywood, Fla.
March 23–24, 1983
ASSOCIATION FOR THE CARE OF ASTHMA ANNUAL MEETING & POSTGRADUATE COURSE IN ALLERGY & IMMUNOLOGY
For further information contact Harold A. Ifft, Assoc. for the Care of Asthma, P.O. Box 568, Spring Valley Road, Ossining, NY 10562. Tel: 914/762-1941.

The International Association for Human Relations Laboratory Training

Box 233—Kensington Station
Brooklyn, NY 11218
* COPENHAGEN
February 14–21, 1983
INTERNATIONAL OCCUPATIONAL ENRICHMENT HUMAN RELATIONS CONFERENCES
* ANTIGUA
February 13–20, 1983 and February 20–27, 1983
INTERNATIONAL OCCUPATIONAL ENRICHMENT HUMAN RELATIONS CONFERENCES
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AMA'S PHYSICIANS' PLACEMENT SERVICE

Physicians seeking placement opportunities outside New York State should contact AMA, Physicians' Placement Service, 535 N. Dearborn Street, Chicago, Ill. 60610. Tel: 312/751-6000 and also refer to the physicians' opportunities listed in the classified ad section of *JAMA*, the Journal of the AMA.

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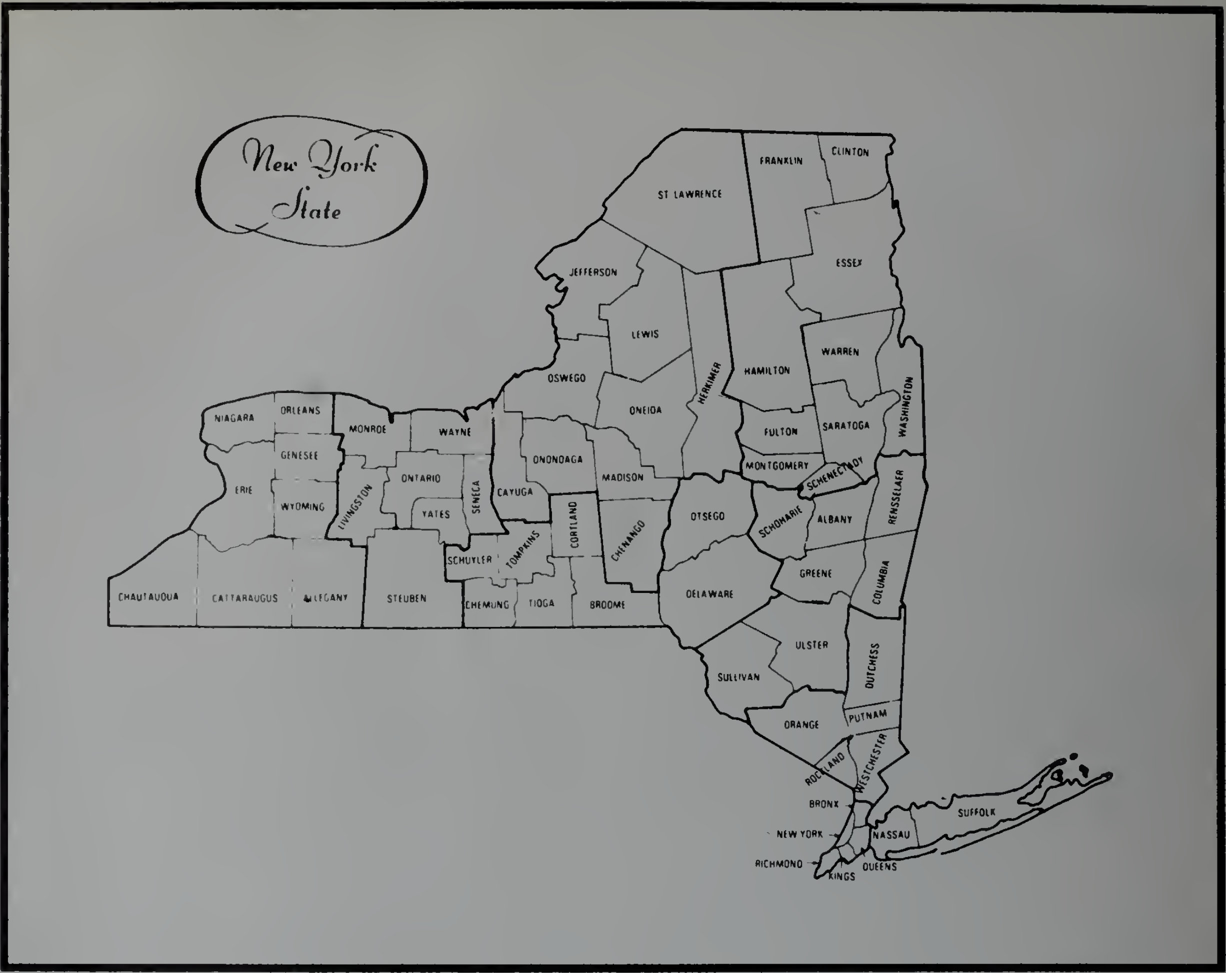

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SARATOGA SPRINGS, N.Y., contact Allen T. Jones, M.D., 31 Myrtle St., Saratoga Springs 12866. Tel: 518/584-1978.

WILLARD Area Hospital, Ohio, contact James H. Ross, Jr., Administrator. Tel: 419/933-2931 between 8:00 a.m.–4:00 p.m.

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c) Group practice? Please give details, i.e., number in group, number in this specialty, when group was commenced______________________________

Please show what type of financial agreement is acceptable: a) Straight salary?__________
b) Percentage basis?______c) Will investment be necessary?____________________
d) If partnership basis is acceptable, how soon would it be available?______________
______________e) Would written agreement be used?____________________

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Living quarters available? Yes____NO____ If yes, describe briefly____________________

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If no, please describe hospitals in nearby areas______________________________

List any other features which you consider would make the position attractive to a prospective physician______________________________

List person to be contacted by interested physician giving name, address and telephone number

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Citizenship Status__________________________Marital Status__________

Medical School____________________________Year Graduated__________

Internship____

Hospitals__________________________________Dates______________

Residency____

Hospitals__________________________________Dates______________

Specialty____

Licensed in what States?____

Applied for____

American Board Certificates held?__________________________________

Eligible____________________Certified__________________________

Do you have a New York State License?________Date of Certificate____________

Military Status____

Professional Organization Memberships______________________________

Are you in practice at present?________What type of practice are you interested in?

Solo______Associate______Industrial______Group______Institutional______

Other____

Date you will be available for practice________Former locations in which you have practiced____

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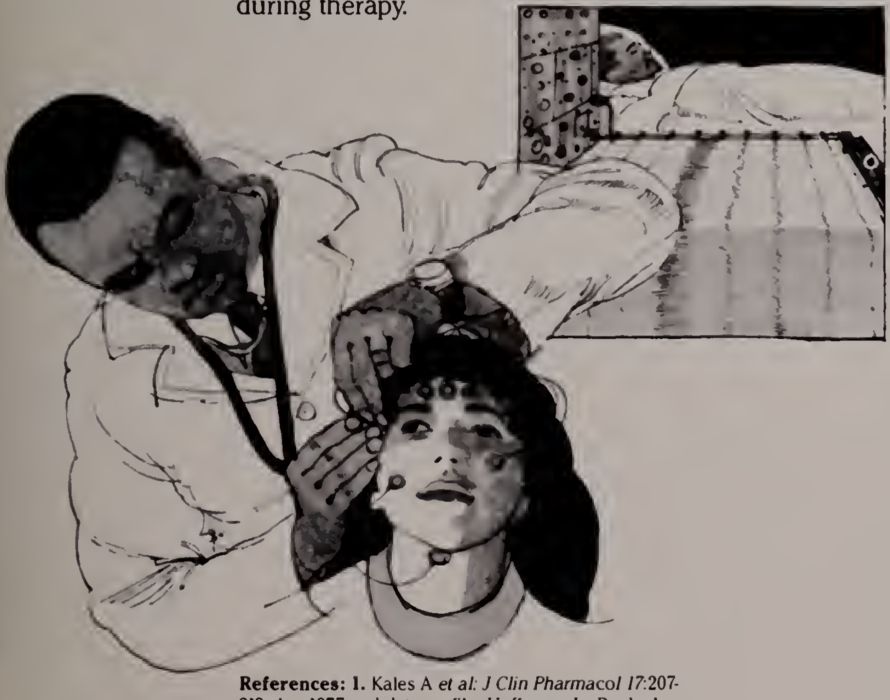

References: **1.** Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **4.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **5.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Kales JD: *Pharmacol Physicians 4*:1-6, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*:25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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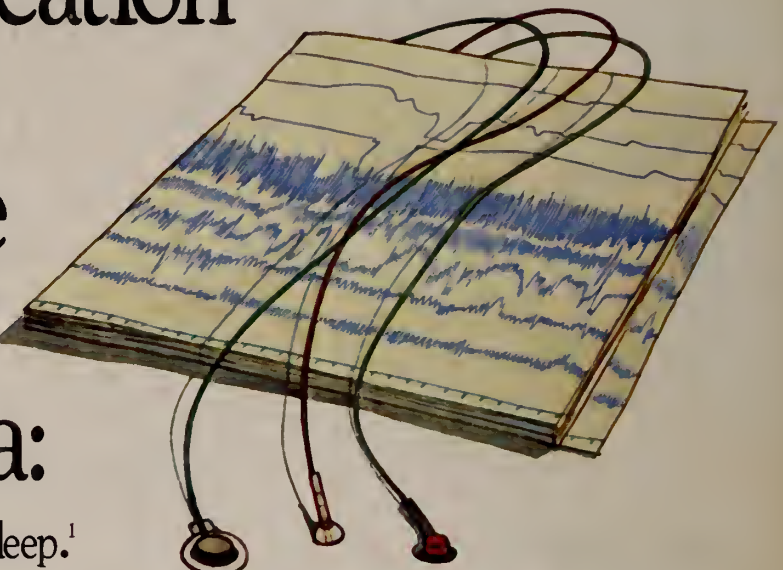

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Preliminary Program • Page 381

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Bioavailability findings* of Oral, Sublingual and Chewable Cardilate® dosage forms in volunteers demonstrated that the Oral (swallowed) 10mg Tablet provided a 6-hour duration of pharmacologic effect; more than 3 times longer than when given sublingually, or as the chewable Tablet. Cardilate Oral Tablets are recommended for the prophylaxis and long-term treatment of patients with frequent or recurrent anginal pain and reduced exercise tolerance associated with angina pectoris.

*Hannemann, R. E., Erb, R. J., Stoltman, W. P., Bronson, E. C., Williams, E. J., Long, R. A., Hull, J. H. and Starbuck, R. R.: Digital Plethysmography For Assessing Erythrityl Tetranitrate Bioavailability. Clin Pharmacol and Ther 29:35-39, 1981.

Cardilate®
(erythrityl tetranitrate)
Tablets

INDICATIONS: Cardilate (Erythrityl Tetranitrate) is intended for the prophylaxis and long-term treatment of patients with frequent or recurrent anginal pain and reduced exercise tolerance associated with angina pectoris rather than for the treatment of the acute attack of angina pectoris since its onset is somewhat slower than that of nitroglycerin.

CONTRAINDICATIONS: Hypersensitivity or idiosyncratic reaction to organic nitrates.

WARNINGS: The use of nitrates in acute myocardial infarction or congestive heart failure should be undertaken only under close clinical observation and / or in conjunction with hemodynamic monitoring.

PRECAUTIONS: Use with caution in patients with severe liver or renal disease. Tolerance to this drug, and cross-tolerance to other nitrates, may occur. Cardilate should be given to a pregnant woman only if clearly needed. Caution should be exercised when Cardilate is administered to a nursing woman. Safety and effectiveness in children have not been established

ADVERSE REACTIONS: The most frequent adverse reaction in patients treated with Cardilate is headache Other adverse reactions occurring are the following: cutaneous vasodilatation with flushing, and transient episodes of dizziness and weakness, plus other signs of cerebral ischemia associated with postural hypotension Occasional individuals exhibit marked sensitivity to the hypotensive effects of organic nitrates, and severe responses (e g., nausea, vomiting, weakness, restlessness, pallor, perspiration and collapse) can occur even with the usual therapeutic dose Alcohol may enhance this effect Drug rash and / or exfoliative dermatitis may occasionally occur

DOSAGE AND ADMINISTRATION: Oral Sublingual Tablets Cardilate (Erythrityl Tetranitrate) may be administered either sublingually or orally. Therapy may be initiated with 10 mg. prior to each anticipated physical or emotional stress and at bedtime for patients subject to nocturnal attacks. The dose may be increased or decreased as needed

HOW SUPPLIED: TABLETS (Scored) for ORAL or SUBLINGUAL USE 5 mg Bottle of 100 10 mg Bottles of 100 and 1000

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New York State Journal of Medicine (ISSN 0028-7628)

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New Editor of the *Journal*

Alan Blum, M.D., has succeeded Alfred A. Angrist, M.D. as Editor of the *Journal*. Dr. Angrist continues his association with the Society as Editor Emeritus and Editorial Consultant.

Dr. Blum, 34, most recently served as editor of *The Medical Journal of Australia*. He was born in Rockaway Beach, Queens and is the son of the late Leon Blum, M.D., a member of the Society for 37 years. Dr. Blum is a graduate of Amherst College and Emory University School of Medicine. After serving a medical internship at the Royal Victoria Hospital in Montreal, he completed a residency and teaching fellowship in family medicine at the University of Miami. He then received a Morris Fishbein Fellowship in Medical Journalism at *JAMA*. Prior to being named editor of *The Medical Journal of Australia*, he was a lecturer in family medicine at the University of Illinois and a faculty member of the Department of Family Practice at Lutheran General Hospital, Park Ridge, Illinois. He is a fellow of the American Academy of Family Physicians.

Dr. Blum's published works in books and medical journals have focused on preventive medicine, medical education, and the way in which health issues are presented in the mass media. This has led to speaking engagements at more than 40 medical schools and over 200 conferences. In 1977, he founded DOC (Doctors Ought to Care), a coalition of physicians and medical students working with teenagers to counteract cigarette advertising and other promotions of lethal lifestyles.

The New York State Journal of Medicine has now become one of only three peer-reviewed general medical journals in the United States with a full-time physician-editor (*JAMA* and *The New England Journal of Medicine* are the other two). The *Journal* will aim to attract a greater amount of original research and commentary from across the nation, to stimulate a lively letters to the editor column, and to increase its coverage of socioeconomic issues. Resident and student participation will be encouraged. All readers are welcome to propose the names of authors and topics for editorials and other articles to this independent, ecumenical, scientific journal.

CME 83

MEDICAL PRACTICE IN THE NUCLEAR AGE

These Professors and other outstanding speakers will be at the Medical Society of the State of New York's 1983 Annual CME Assembly, May 13–15, at the Rye Town Hilton.

◆

Harold L. Atkins, M.D.
Professor of Radiology and Director of Nuclear Medicine, State University of New at Stony Brook. *Annihilation, Coincidences and Scintillation: The Application of Nuclear Energy to the Diagnostic Process*

Victor P. Bond, M.D.
Associate Director for Life Sciences and Safety, Brookhaven National Laboratories, Upton. Professor of Medicine, State University of New York at Stony Brook. *Health Effects of Low Level Ionizing Radiation*

Alexander Leaf, M.D.
Chairman, Department of Preventive Medicine and Clinical Epidemiology and Ridley Watts Professor of Preventive Medicine, Harvard Medical School, Boston, Massachusetts

Francis L'esperance, M.D.
Associate Professor of Clinical Ophthalmology, Columbia University College of Physicians and Surgeons, New York City. *Ophthalmic Lasers: Instrumentation and Applications*

Richard Satran, M.D.
Professor of Neurology, University of Rochester School of Medicine and Dentistry, Rochester. *Vascular Headache: Migraine and Cluster Headache Syndromes*

Bennett M. Stein, M.D.
Byron Stookey Professor of Neurological Surgery, Columbia University College of Physicians and Surgeons; Director of Neurological Surgery, Columbia-Presbyterian Medical Center, New York City. *Surgical Treatment of Medial Hemispheric AVM's* (*Arterio Venous Malformations*)

Joseph P. Whalen, M.D.
Professor and Chairman, Department of Radiology, Cornell University Medical College; Radiologist and Chief, The New York Hospital, Cornell Medical Center, New York City. *Computerized Tomography of the Chest*

Lawrence A. Yannuzzi, M.D.
Surgeon Director in Ophthalmology, Manhattan Eye, Ear and Throat Hospital; Associate Clinical Professor of Ophthalmology, Cornell Medical School, New York City. *Krypton Laser Photocoagulation for Retino-Vascular and Macular Diseases*

◆

A highlight of the Assembly will be the General Session entitled "Medical Implications of the Nuclear Age". The 2½ days of Scientific Meetings will provide the individual physician with 18 credits out of a total of 75 Category I CME Credits being offered. Over 100 outstanding speakers, including 20 from out of state, will present papers at 26 sessions. Also, each program is acceptable for prescribed or personal interest credits by the American Academy of Family Physicians. See this issue of the Journal for the pre-registration form.

HYPERTENSION
PROTECTION
AND MORE.
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90
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INDERAL, a logical first step

Unlike thiazide diuretics, which can provoke serious reductions of serum potassium, INDERAL has been found to maintain or modestly increase serum potassium levels.[1,2] Therefore, the consequences of hypokalemia—including the threat of ventricular arrhythmias[2]—may be significantly reduced.

INDERAL acts to reduce catecholamine-induced "spiking" of blood pressure which often coincides with the physical and emotional stress in a hypertensive's life.[3] INDERAL reduces elevated heart rate, force of ventricular contraction, and cardiac work load—providing smooth control of hypertension to decrease the risk of related cardiovascular complications. (INDERAL should not be used in the presence of congestive heart failure, sinus bradycardia, heart block greater than first degree, or bronchial asthma.)

INDERAL works in a way that non-beta blockers can't—to provide long-term cardiovascular benefits.

INDERAL provides treatment for coexisting angina pectoris or cardiac arrhythmias in addition to reducing blood pressure—for comprehensive protection. What's more, INDERAL is well tolerated, acting with few of the distressing side effects of antihypertensive agents such as methyldopa or reserpine. Impotence, depression, sedation, orthostatic hypotension, and nasal stuffiness are rare. (Please see following page for Brief Summary of Prescribing Information, including side effects of INDERAL.)

Indeed, INDERAL has changed the face of antihypertensive therapy, worldwide. And it continues to do so—with an unparalleled record of clinical efficacy and experience.

INDERAL. It's the kind of protection hypertensive patients need—right from the start.

References: 1. Traub, Y. M., *et al.*: Clin. Pharmacol. Ther. *28*:765 (Dec.) 1980. 2. Hollifield, S.W., and Slaton, R.E.: Acta Med. Scand. *647* (Suppl.):67, 1981. 3. Cohen, J.D.: Propranolol vs. diuretics in initial therapy for hypertension. Medical Education Programs Ltd., Ayerst Laboratories, 1982.

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Comprehensive Cardiovascular Protection

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THE MOST WIDELY PRESCRIBED BETA BLOCKER IN THE WORLD

INDERAL®

(PROPRANOLOL HCl)

B.I.D. FOR HYPERTENSION

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BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)
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Inderal® (propranolol hydrochloride)

BEFORE USING INDERAL (PROPRANOLOL HYDROCHLORIDE), THE PHYSICIAN SHOULD BE THOROUGHLY FAMILIAR WITH THE BASIC CONCEPT OF ADRENERGIC RECEPTORS (ALPHA AND BETA), AND THE PHARMACOLOGY OF THIS DRUG

CONTRAINDICATIONS

Propranolol hydrochloride is contraindicated in 1) bronchial asthma, 2) allergic rhinitis during the pollen season, 3) sinus bradycardia and greater than first degree block; 4) cardiogenic shock, 5) right ventricular failure secondary to pulmonary hypertension; 6) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol; 7) in patients on adrenergic-augmenting psychotropic drugs (including MAO inhibitors), and during the two week withdrawal period from such drugs

WARNINGS

CARDIAC FAILURE Sympathetic stimulation is a vital component supporting circulatory function in congestive heart failure, and inhibition with beta-blockade always carries the potential hazard of further depressing myocardial contractility and precipitating cardiac failure Propranolol acts selectively without abolishing the inotropic action of digitalis on the heart muscle (i e., that of supporting the strength of myocardial contractions). In patients already receiving digitalis, the positive inotropic action of digitalis may be reduced by propranolol's negative inotropic effect. The effects of propranolol and digitalis are additive in depressing AV conduction.

IN PATIENTS WITHOUT A HISTORY OF CARDIAC FAILURE, continued depression of the myocardium over a period of time, can, in some cases, lead to cardiac failure In rare instances, this has been observed during propranolol therapy. Therefore, at the first sign or symptom of impending cardiac failure, patients should be fully digitalized and/or given a diuretic, and the response observed closely: a) if cardiac failure continues, despite adequate digitalization and diuretic therapy, propranolol therapy should be immediately withdrawn, b) if tachyarrhythmia is being controlled, patients should be maintained on combined therapy and the patient closely followed until threat of cardiac failure is over.

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following *abrupt* discontinuation of propranolol therapy Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease, who are given propranolol for other indications.

IN PATIENTS WITH THYROTOXICOSIS, possible deleterious effects from long-term use have not been adequately appraised Special consideration should be given to propranolol's potential for aggravating congestive heart failure Propranolol may mask the clinical signs of developing or continuing hyperthyroidism or complications and give a false impression of improvement Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. This is another reason for withdrawing propranolol slowly Propranolol does not distort thyroid function tests

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker In one case this resulted after an initial dose of 5 mg propranolol

IN PATIENTS UNDERGOING MAJOR SURGERY, beta-blockade impairs the ability of the heart to respond to reflex stimuli For this reason with the exception of pheochromocytoma, propranolol should be withdrawn 48 hours prior to surgery at which time all chemical and physiologic effects are gone according to available evidence However, in case of emergency surgery, since propranolol is a competitive inhibitor of beta-receptor agonists, its effects can be reversed by administration of such agents, e g , isoproterenol or levarterenol However such patients may be subject to protracted severe hypotension Difficulty in restarting and maintaining the heart beat has also been reported

IN PATIENTS PRONE TO NONALLERGIC BRONCHOSPASM (*e g* CHRONIC BRONCHITIS EMPHYSEMA), propranolol should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETICS AND PATIENTS SUBJECT TO HYPOGLYCEMIA Because of its beta-adrenergic blocking activity, propranolol may prevent the appearance of premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia. This is especially important to keep in mind in patients with labile diabetes. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

USE IN PREGNANCY: The safe use of propranolol in human pregnancy has not been established. Use of any drug in pregnancy or women of childbearing potential requires that the possible risk to mother and/or fetus be weighed against the expected therapeutic benefit. Embryotoxic effects have been seen in animal studies at doses about 10 times the maximum recommended human dose.

PRECAUTIONS

Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if propranolol is administered. The added catecholamine-blocking action of this drug may then produce an excessive reduction of the resting sympathetic nervous activity Occasionally, the pharmacologic activity of propranolol may produce hypotension and/or marked bradycardia resulting in vertigo, syncopal attacks, or orthostatic hypotension.

As with any new drug given over prolonged periods, laboratory parameters should be observed at regular intervals The drug should be used with caution in patients with impaired renal or hepatic function.

ADVERSE REACTIONS

Cardiovascular bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; arterial insufficiency, usually of the Raynaud type; thrombocytopenic purpura. *Central Nervous System*: lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. *Gastrointestinal*: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis. *Allergic*. pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress. *Respiratory* bronchospasm. *Hematologic* agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura *Miscellaneous*. reversible alopecia. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta-blocker (practolol) have not been conclusively associated with propranolol. *Clinical Laboratory Test Findings* Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

HOW SUPPLIED

INDERAL (propranolol hydrochloride)

TABLETS

—Each hexagonal-shaped, orange, scored tablet is embossed with an "I" and imprinted with "INDERAL 10," contains **10 mg** propranolol hydrochloride, in bottles of 100 (NDC 0046-0421-81) and 1,000 (NDC 0046-0421-91) Also in unit dose package of 100 (NDC 0046-0421-99).

—Each hexagonal-shaped, blue, scored tablet is embossed with an "I" and imprinted with "INDERAL 20," contains **20 mg** propranolol hydrochloride, in bottles of 100 (NDC 0046-0422-81) and 1,000 (NDC 0046-0422-91). Also in unit dose package of 100 (NDC 0046-0422-99).

—Each hexagonal-shaped, green, scored tablet is embossed with an "I" and imprinted with "INDERAL 40," contains **40 mg** propranolol hydrochloride, in bottles of 100 (NDC 0046-0424-81) and 1,000 (NDC 0046-0424-91) Also in unit dose package of 100 (NDC 0046-0424-99).

—Each hexagonal-shaped, pink, scored tablet is embossed with an "I" and imprinted with "INDERAL 60," contains **60 mg** propranolol hydrochloride, in bottles of 100 (NDC 0046-0426-81) and 1,000 (NDC 0046-0426-91), and in unit dose packages of 100 (NDC 0046-0426-99)

—Each hexagonal-shaped, yellow, scored tablet is embossed with an "I" and imprinted with "INDERAL 80," contains **80 mg** propranolol hydrochloride, in bottles of 100 (NDC 0046-0428-81) and 1,000 (NDC 0046-0428-91). Also in unit dose package of 100 (NDC 0046-0428-99)

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Store at room temperature (approximately 25° C)

INJECTABLE

—Each ml contains 1 mg of propranolol hydrochloride in Water for Injection The pH is adjusted with citric acid Supplied as 1 ml ampuls in boxes of 10 (NDC 0046-3265-10).

Store at room temperature (approximately 25° C)

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Medical News

Appointments and Awards

Michael A. Zevon, M.D., has been named director of Psychology Services at Roswell Park Memorial Institute. Dr. Zevon has served as assistant professor of psychology at SUNY-Buffalo, and as consulting psychologist to the American Cancer Society and Roswell Park since 1979. In his new position, he will supervise that division of rehabilitation which provides counseling and psychological support to over 360 cancer patients and their families each year.

Duncan W. Clark, M.D., emeritus professor, Department of Preventive Medicine and Community Health, Downstate Medical Center has been elected president of The New York Academy of Medicine, for a term of two years.

W. P. Laird Myers, M.D., associate dean at Cornell University Medical College and chairman of Clinical Educational Affairs at Memorial-Sloan-Kettering Cancer Center, has been elected a Vice President of the New York Academy of Medicine for a term of three years.

H. Ketcham Morrell, Jr., M.D., of Syracuse, New York has been elected First Vice President of the 18,000 member American Society of Anesthesiologists.

Harry Most, M.D., professor of Medicine and former chairman of the Department of Preventive Medicine at New York University Medical Center, was the 1981 recipient of the Walter Reed Medal of the American Society of Tropical Medicine and Hygiene.

John K. Lattimer, M.D., professor and chairman emeritus, Department of Urology, Columbia University College of Physicians and Surgeons, is the 1983 Valentine Medalist of the New York Academy of Medicine. He received the medal and award at a dinner in his honor, February 23, 1983, at the Academy.

Alexander Wolf, M.D., a charter fellow of the American Group Psychotherapy Association, has been unanimously elected by its board of directors to their "Distinguished Fellowship" award. This award, the highest recognition given by the association, was presented to Dr. Wolf on February 11, 1983.

Hiroshi Takita, M.D., has been appointed chief of the Thoracic Surgery Department of Roswell Park Memorial Institute. He joined the Thoracic Surgery Department in 1968 as a cancer research surgeon; since 1971 he has served as the associate chief.

(Medical news continued on page 286)

OPPORTUNITY WITHOUT RISK

Series EE Savings Bonds now offer savers the benefits of market interest rates, without any risk to principal. Interest is variable, based on 85% of market rates when a bond is held five years or longer. So, for as little as $25, you can get market advantages for your savings.

Bond Face Amount	$50	$75	$100	$200
Purchase Price	$25	$37.50	$ 50	$100

There's no limit on what you can earn. For example, when market rates average 13%, bonds earn about 11%. If rates go higher, bonds earn even more. The rates are averaged every six months. You receive a cumulative average rate at redemption. (Bonds held less than five years earn interest on a fixed, graduated scale.)

The minimum guaranteed rate is 7.5%, even if market rates average lower. So there's no market risk.

Outstanding bonds retain their current guarantees, and will automatically earn prevailing higher rates if held five more years. So there's no need to cash in older bonds.

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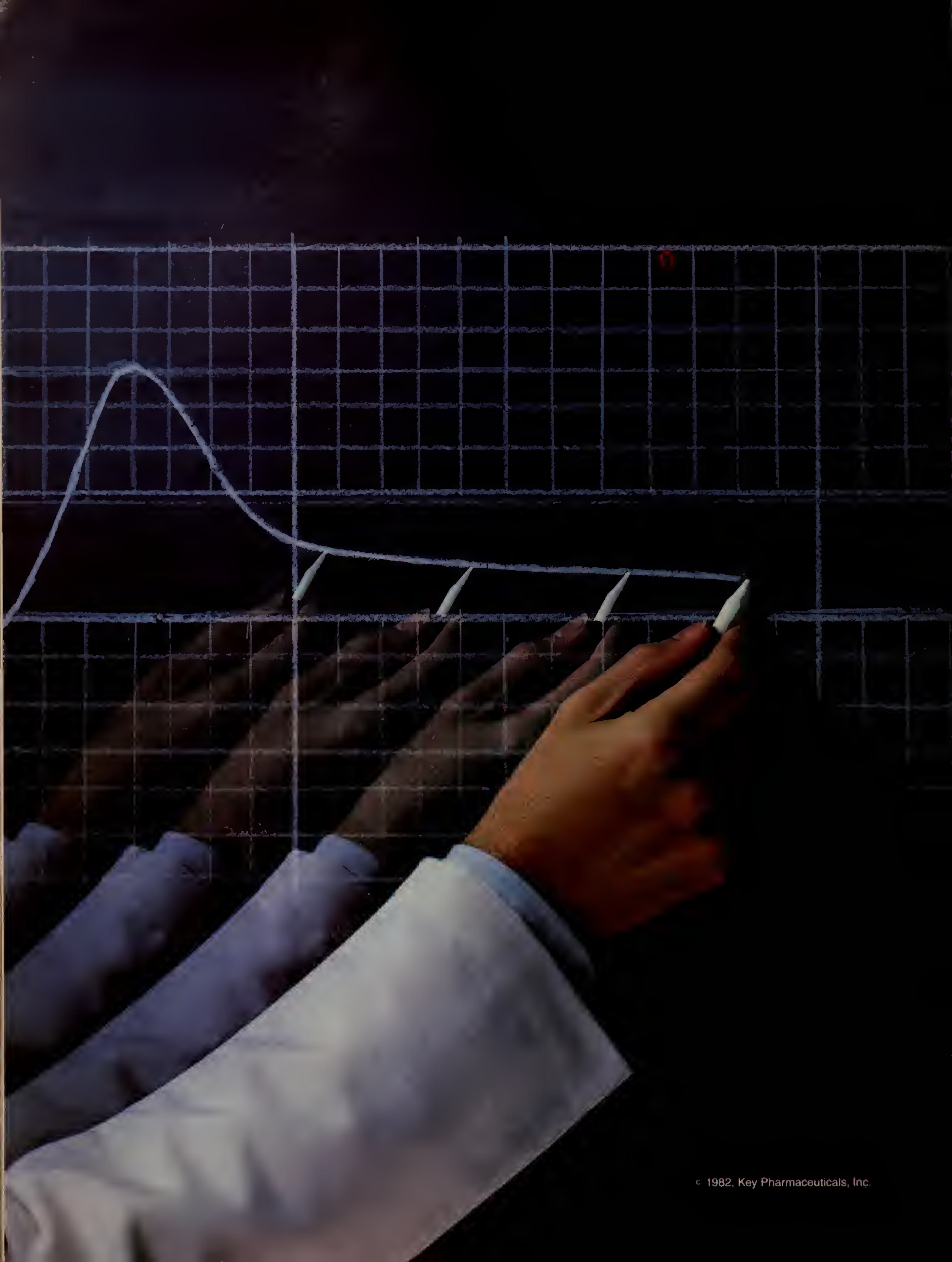

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We straightened out the problem of theophylline blood levels.

THEO-DUR® (anhydrous theophylline)—
The first and only form of oral theophylline to demonstrate linear blood levels for a full 12 hours in virtually all patients, even those who are rapid metabolizers.

Until THEO-DUR, blood levels from rapid acting and sustained action theophyllines generally showed unacceptably wide peak-trough fluctuations. This meant the drug was difficult to maintain in the therapeutic range and difficult to sustain in that range for more than a few hours.

For most patients, the therapeutic range of theophylline falls somewhere between 10 and 20 mcg/ml. When serum concentrations fall much below 10, they are often ineffective. When they go much above 20, they are usually toxic.

Now, with THEO-DUR, you can provide your patient with maximum theophylline protection and avoid theophylline failure.

And, since THEO-DUR can maintain therapeutic blood levels for a full 12 hours, patients can enjoy a full day of normal activities and a night of uninterrupted sleep.

Zero-order THEO-DUR—a unique form of oral theophylline.

THEO-DUR provides zero-order drug absorption. The theophylline is absorbed into the blood at an essentially constant quantity per hour.

Other oral forms of theophylline have first-order absorption, in which the largest amount is absorbed in the first hour and proportionately smaller amounts thereafter.

When absorption varies, as it does with first-order drugs, protection can also vary. That's why first-order theophyllines can be toxic within the first few hours and subtherapeutic later on.

THEO-DUR—the practical benefits.

Your patient benefits from the maximum control provided by THEO-DUR in several important ways: exercise tolerance is increased, emergency hospital visits are less likely and concomitant therapy is usually unnecessary.

Dosage titration is easy to achieve.* THEO-DUR is the only sustained action tablet in 200 mg as well as 100 and 300 mg strengths and all tablets are scored for greater dosage flexibility.

THEO-DUR also enhances patient compliance—with an every 12-hour dosage schedule that's easier to remember.

**After three days, on a steady dose, serum concentrations should be monitored and appropriate dosage adjustments made, if necessary.*

Today's most widely prescribed bronchodilator.

THEO-DUR®
(anhydrous theophylline)
Sustained Action Tablets

Please see next page for a summary of prescribing information.

THEO-DUR®
(anhydrous theophylline)
Sustained Action Tablets

Today's most widely prescribed bronchodilator.

Description: THEO-DUR Sustained Action Tablets contain anhydrous theophylline, with no color additives.
Pharmacologic Actions: The pharmacologic actions of theophylline are as a bronchodilator, pulmonary vasodilator and smooth muscle relaxant since the drug directly relaxes the smooth muscle of the bronchial airways and pulmonary blood vessels. Theophylline also possesses other actions typical of the xanthine derivatives: coronary vasodilator, diuretic, cardiac stimulant, cerebral stimulant and skeletal muscle stimulant. The actions of theophylline may be mediated through inhibition of phosphodiesterase and a resultant increase in intracellular cyclic AMP which could mediate smooth muscle relaxation.
Indications and Usage: Symptomatic relief and/or prevention of asthma and reversible bronchospasm associated with chronic bronchitis and emphysema.
Contraindications: THEO-DUR is contraindicated in individuals who have shown hypersensitivity to any of its components or xanthine derivatives.
Warnings: Excessive theophylline doses may be associated with toxicity; serum theophylline levels should be monitored to assure maximum benefit with minimum risk. Incidence of toxicity increases at serum levels greater than 20 mcg/ml. High blood levels of theophylline resulting from conventional doses are correlated with clinical manifestation of toxicity in: patients with lowered body plasma clearances, patients with liver dysfunction or chronic obstructive lung disease, and patients who are older than 55 years of age, particularly males. There are often no early signs of less serious theophylline toxicity such as nausea and restlessness, which may appear in up to 50% of patients prior to onset of convulsions. Ventricular arrhythmias or seizures may be the first signs of toxicity. Many patients who have higher theophylline serum levels exhibit a tachycardia. Theophylline products may worsen pre-existing arrhythmias.
Usage in Pregnancy: Safe use in pregnancy has not been established relative to possible adverse effects on fetal development, but neither have adverse effects on fetal development been established. This is, unfortunately, true for most anti-asthmatic medications. Therefore, use of theophylline in pregnant women should be balanced against the risk of uncontrolled asthma.
Precautions: THEO-DUR TABLETS SHOULD NOT BE CHEWED OR CRUSHED. Theophyllines should not be administered concurrently with other xanthine medications. It should be used with caution in patients with severe cardiac disease, severe hypoxemia, hypertension, hyperthyroidism, acute myocardial injury, cor pulmonale, congestive heart failure, liver disease, and in the elderly, particularly males, and in neonates. Great caution should be used in giving theophylline to patients in congestive heart failure since these patients show markedly prolonged theophylline blood level curves. Use theophylline cautiously in patients with history of peptic ulcer. Theophylline may occasionally act as a local irritant to G.I. tract, although gastrointestinal symptoms are more commonly central and associated with high serum concentrations above 20 mcg/ml.
Adverse Reactions: The most consistent adverse reactions are usually due to overdose and are:
Gastrointestinal: Nausea, vomiting, epigastric pain, hematemesis, diarrhea.
Central Nervous System: Headaches, irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions.
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(*Medical news continued from page 283*)

Jeremiah A. Barondess, M.D., of New York City, will be awarded the Alfred E. Stengel Memorial Award by the American College of Physicians (ACP) at their 64th Annual Session in San Francisco, April 11–14, 1983. During his two decades of membership in the College, he has served as ACP president (1978–1979) and among other posts has been governor, regent, and annual session chairman.

Norman G. Schaaf, M.D., chief of the Dentistry and Maxillofacial Prosthetics Department at Roswell Park Memorial Institute, has been appointed director-at-large of the National American Cancer Society (ACS) and its New York State division.

The AFAR (American Federation for Aging Research, Inc.) has announced the recipients of its first series of grants for basic research in aging. Among them were David Soifer, Ph.D., who is with the Institute for Basic Research in Developmental Disabilities, Staten Island, New York. His research proposal was "Monoclonal Antibodies for the Study of Alzheimer's Disease" (newer immunologic methods to probe the aging process).

Downstate Medical Center—SUNY Brooklyn, has announced the following appointment and promotions:

> Larry I. Lutwick, M.D., currently associate director of the Department of Medicine, has been appointed associate professor of medicine.
>
> Patrick R. Bergevin, M.D., presently serving as director of the Division of Oncology at Coney Island Hospital, has been promoted to associate professor of clinical medicine.
>
> Pietro Albanese, M.D., has been promoted to clinical associate professor of obstetrics and gynecology. He is president of the Queens Gynecological Society.
>
> Louis C. Cutolo, M.D., chairman of the Cancer and Tissue Committees at Long Island College Hospital, has been promoted to clinical associate professor of surgery.
>
> Winston G. Mitchell, M.D., has been promoted to clinical associate professor of surgery.

Frederick Helm, M.D., chief of dermatology at Roswell Park Memorial Institute, has been appointed chairman of the Department of Dermatology at the State University of New York—Buffalo.

"A CME Sampler"

In the practice of medicine, there are constant opportunities for the physician to learn and to teach. However, the widespread introduction of mandatory continuing medical education in the past decade has made CME almost as controversial an issue as the MX missile. The following comments are excerpted from several of the many articles written about CME in recent years.

—Editor

Let's face it. The issue generates more heat than it deserves. What constitutes the *entity* of CME is a definitional question, fun to debate but, by itself, not very consequential in the real world. What constitutes *credit* for CME is a matter that counts only in those places where adding up brownie points is a problem for some physicians.

And yet — there may just be an underlying philosophical question here that deserves some thought. The recent Alliance for Continuing Medical Education (ACME) Annual Conference pointed up that it is no easy matter to assess the educational needs of physicians, individually or collectively. Are documented deficiencies any better than gut-reaction, felt needs? Are practice-related topics better than basic science reviews? What about acquiring better management techniques? Or learning to communicate better? Or mastering computer programming? Or gaining an insight while studying investments and art?

Could it be that the mere process of participating in an educational effort is what is beneficial? It just may be that learning anything will contribute to making us better doctors.—**William C. Felch.** What Is Good CME? *ACME Almanac* June 1982.

In the planning of these programs, we have also been concerned with the contemporary technological advances and their impact on us. Is there validity in the concept that technology as it grows becomes indifferent to all traditional human needs and values by becoming an end in itself? Are not the criticisms, accusations, and indictments being leveled against us, stating that our profession has become uncaring and unfeeling, unjustified? These are painful words for us to hear; although they are not justified, it behooves us to attempt to understand the basis for such complaints.

If we go back and read some of Seneca's writings, it may help us to understand that our esteemed position in history involves more than merely technical skill. In his forthright style, he tells us "We are under an obligation to physicians, not because of their skill, which they sell, but because of their kind and friendly goodwill; for whom no service is too burdensome, none too distasteful to perform, and who is not indifferent to our moans." These needs which patients experienced centuries ago, are no different today; and the attentiveness and concern which was appreciated then will also be esteemed in our own twentieth century. It is not our advanced skills, nor is it our sophisticated medical equipment, which constitutes the problem. Quite the contrary, for these new modalities are sought and gratefully accepted. It is only when we overlook the humane aspects that there will be criticism.

Within our programs it may also be important to emphasize the qualitative values of life, for this is what is meant when we speak of humanism in medicine. It connotes compassion, benevolence, and charity. It implies human understanding, a social conscience, and a sympathetic attitude toward those in distress.—**Stephen Nordlicht,** Continuing Medical Education. *NY State J Med* 1979; 79: 931–32.

Programs of continuing education in medicine are less than optimally effective. Why should this be? Teachers speak of "conditions for learning," and in adult education it has been suggested that the conditions necessary to encourage learning are the following: the student must be adequately motivated to change his behavior; he must be aware of the inadequacy of his present behavior (and the superiority of the behavior he is required to adopt); he must have a clear picture of the new behavior; he must have opportunities to practice the new behavior with a sequence of appropriate materials; and he must get continuing reinforcement of the new behavior.

Once brought to one's attention, these points become almost self-evident. But the reason for the failure of so many of our postgraduate courses to achieve any detectable advance in our own assessment, even of our own competence, becomes equally clear. Motivation in the sense of the first condition is not a problem, at least with those who attend a program. The third condition is usually satisfactorily met, though it must be admitted that the expression of the curricular goal in behavioral terms uncovers many problems concerning the appropriateness of the topics that are included in our programs. The last two conditions are fundamental to residency-training programs and no doubt with time will be seen to be equally important component of all postgraduate activities. But the second condition, awareness of the inadequacy of present methods, attitudes, therapies and diagnosis, and the superiority of other methods, introduces a very large topic. It points to an area in which the profession has a poor record, in accepting what with hindsight can be seen to be inferior methods to replace less inferior

(*CME Sampler continued on page 289*)

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Please see adjacent page for brief summary of prescribing information.

(*CME Sampler continued from page 287*)

methods, as well as in failing to accept superior methods. The extensive use of anticoagulants for the treatment of myocardial infarction only 10 years ago, yet now almost abandoned, and the prophylaxis of hemorrhage from esophageal varices by means of portacaval or similar shunts, which now are rapidly falling from favor in the face of apparently mounting evidence of its uselessness, may be two recent examples of how the profession was duped by what was to be called a fashion.

"Fashion" is not a word that one likes to see describing contemporary medicine, for it connotes a way of behaving that has only the justification of majority support or the approval of the elite. The doctor, not seeking knowledge, is seeking power — power over the behavior of the human organism if that is possible, or power to predict its behavior if it is not. If the doctor accepts a fashionable belief as knowledge, he is being duped into accepting as a tool something that will not perform any relevant task.—**A. J. SCOTT,** Continuing Education: More or better? *N Engl J Med* 1978; 298:444.

This paper will focus mainly on talks given at rounds, conferences, and symposia. Other aspects of CME—throw-away journals, books and pamphlets, cassette tapes and films—are even more heavily subsidized by drug companies. In testimony before Senator Nelson's subcommittee on April 28, 1976, Dr. Richard Crout, director of the FDA Bureau of Drugs, stated that "the growing influence of the pharmaceutical industry on medical education is a long-term threat to the integrity of the medical profession." He went on to describe the possible sources of bias that cause "these sponsored materials to be consistently tilted in the direction of therapeutic enthusiasm" in that "it is inevitable that the educational materials produced by and for an industry with an interest is increasing sales of drugs will, on balance, be biased in a direction intended to promote drug use."

However, as pointed out in Dr. Crout's testimony FDA regulations control the materials distributed commercially in written or audiovisual forms under the labeling provisions of the law. Therefore, such materials may not promote nonapproved use of drugs, minimize hazards or make comparisons not supported by evidence. Only if such materials are prepared and distributed privately and without commercial interest may they fall outside the drug-labeling laws.

But oral presentation, which cannot be so restricted, pose a potential threat while, at the same time they are the most widely used format for CME. Even the most autocratic federal official would abhor any degree of mandated control over such presentations. Yet the concern expressed by Dr. Crout, that the present system "places the postgraduate educa-

(*CME Sampler continued on page 340*)

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Precautions: *Head injury and increased intracranial pressure* The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a preexisting increase in intracranial pressure. Narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.
Acute abdominal conditions. Codeine or other narcotics may obscure the diagnosis or clinical course in patients with acute abdominal conditions.
Special risk patients. Administer with caution to certain patients such as the elderly or debilitated, and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, and prostatic hypertrophy or urethral stricture.
Information for Patients: Codeine may impair the mental and or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery. The patient taking this drug should be cautioned accordingly.
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The use of MAO inhibitors or tricyclic antidepressants with codeine preparations may increase the effect of either the antidepressant or codeine.
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Usage in Pregnancy: Safe use in pregnancy has not been established relative to possible adverse effects on fetal development. Therefore, acetaminophen and codeine should not be used in pregnant women unless, in the judgment of the physician, the potential benefits outweigh the possible hazards.
Nursing Mothers: It is not known whether the components of this drug are excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when acetaminophen and codeine are administered to a nursing woman.
Adverse Reactions: Most frequently: Lightheadedness, dizziness, sedation, shortness of breath, nausea and vomiting. More prominent in ambulatory than in nonambulatory patients, and some of these adverse reactions may be alleviated if the patient lies down. Others. Euphoria, dysphoria, constipation and pruritus.
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Letters to the Editor

Address letters to Editor, **New York State Journal of Medicine,** 420 Lakeville Road, P.O. Box 5404, Lake Success, New York 11042.

The *Journal* welcomes and encourages letters to the editor. Letters should be succinct and precise. Preference for publication will be given to those not exceeding 450 words. Letters must be typewritten and double-spaced, with six or fewer references. The references should be based on the style used in *Index Medicus.* Letters should not duplicate manuscripts or correspondence submitted to other journals, newspapers, or magazines. The signature, academic degree, professional affiliation, and address of each author must be included. Every effort will be made to expedite the publication of accepted letters. All letters are personally acknowledged by the editor.

Nursing Home Visits Based-On-Need

To the Editor: At its meeting in November, 1982, the House of Delegates of MSSNY adopted Resolution 82-50 (Nursing Home Visits Based-On-Need), which opposes a mandatory visit by a physician to a patient in a nursing home at least once every twenty days. I believe that adopting this resolution was unwise and may result in consequences affecting patients and physicians which the makers of this resolution did not foresee.

This population is older and burdened by more severe physical and mental ailments than may be appreciated by physicians who are not involved in their day to day care. I am not against deregulation, for there are myriads of inane regulations imposed on nursing homes which are useless and even detrimental to patient care. However, this though is one regulation which makes sense and does protect the interests of the patient. Acting against this legislation is antiregulatory overkill.

The supporters of this resolution cited the burdens of costs to patients and relatives of the mandated 30-day visits. Since Medicaid pays for the cost of 90% or more of nursing home visits, this argument does not make sense. Cost containment in this instance is also a very questionable point. Should visits be made only when physicians find it convenient, or when the nursing home patient has a critical problem? That would surely result in far greater expenditure for acute in-hospital medical care. We have been preaching preventive medicine for all other patients, so why not those in nursing homes?

What is not generally appreciated, is that the 30-day rule really pertains only to the first three months. Subsequent visits can be made at 60-day intervals. I am fully aware that getting permission for 60-day visits may be cumbersome, but it can be done. Few seem to condemn 30-day visits by octogenarians in an office setting to monitor and treat chronic illnesses, such as hypertension and diabetes. If this is "good medicine," why is it not good medicine to see much sicker patients at 30-day intervals? Let us not delude ourselves on whether visits "based on need" would be as regular and conscientious if there were not this regulation. If certain physicians find that administering to nursing home patients at 30-day intervals is too time consuming, let them turn over their patients to those who are more willing to perform this chore. If we as a profession find taking care of our institutionalized geriatric population is too taxing, let us not cry foul when less qualified but eager non-MD professionals such as nurse practitioners step into the breach to perform this service. And let us not complain if third party carriers refuse to pay for regular nursing home visits "based on need." Their criteria of need may be different than yours.

We do need more flexibility with this rule, perhaps allowing a five- to seven-day leeway either way, but we do not have to abandon completely a good regulation to achieve this. Our primary concern should be as always the patient's medical needs. Visits "based on need" are fine provided these "needs" are not sacrificed to expediency or misunderstanding.

Regular monthly visits by caring physicians can help insure that our nursing homes do give the type of medical care which we want the elderly to have. Otherwise, our nursing homes will become just warehouses for the elderly.

FRED N. FLATAU, M.D.
142-10B Roosevelt Avenue
Flushing, N.Y. 11354

A chem lab in every bathroom

To the Editor: Prior to my first pregnancy, I bought a thermometer and popped it into my mouth for a couple of minutes before getting out of bed. Secondary ovarian failure was not going to interfere with my determination to conceive at the conclusion of my husband's internship. I used graph paper to plot my hormonal progress while practicing birth control. Being naive, in 1958, I never doubted that my chart and body would affect my becoming pregnant first try.

Internship ended and so did my high school teaching job in June. The tiny squares on smooth paper had lines letting me know "now." We did. That offspring is now a 2nd second-year medical student at Upstate Medical Center in Syracuse, New York. The other two, planned to be born before or after a July 1 residency stretch, came about the same way. It is a good thing I didn't pay any attention to endometrial biopsies that belied my conceptual ability.

My cheap mercury in a glass tube might now be marketed as a device to determine when a female ovulates by analyzing her saliva. "We think there is a market worth hundreds of millions of dollars out there," says John R. Toedtman, president of Personal Diagnostics.* For the estimated 2 to 4 million couples who have problems, "Now their alternatives are a $3.50 thermometer or a $1,200 to $4,000 trip to a fertility specialist." Since the product tests a woman's saliva, isn't this kit sexist? Also the implication is, as usual, expensive physician practices money not medical assistance. Mr. Toedtman insists, however, "We think of our products as something that can assist, not replace, the physician."

LOIS GREENE STONE
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* Changes in reimbursement forcing new trends in care. *American Medical News*, January 7, 1983, p 23.

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J-9043-4 July 1981

The following articles were presented at the Annual Continuing Medical Education Assembly of the Medical Society of the State of New York at the Rye Town Hilton, Port Chester, New York in 1982.

Application of Immunoperoxidase Techniques to Diagnostic Surgical Pathology

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GINA TLAMSA, B.S.[b]
New York City

From the Department of Surgical Pathology, College of Physicians and Surgeons of Columbia University.
[a] Professor of Pathology.
[b] Research Associate.

It is not uncommon during the daily practice of surgical pathology to encounter diagnostic problems that defy accurate classification based on the use of routine staining methods commonly aided by a battery of special stains. The routine staining techniques, although the most common diagnostic approach used to evaluate tissues, often fail to provide precise information concerning the histogenesis or functional status of certain lesions. Because of this, we have turned to ancillary techniques including enzyme histochemistry, electron microscopy, chromosome analysis, and tissue culture to obtain more information about the tissues we receive. However, each of these techniques generally requires special preparation of the tissue, usually while it is still unfixed, as well as expensive instruments not always available in every diagnostic laboratory and experienced personnel.

More recently, it has become possible to identify a wide array of antigenic substances in tissues using methods which, although sophisticated, are sufficiently reproducible and easy to perform that they can be easily applied by the average diagnostician.[1–3] Immunofluorescence was the first of these methods widely utilized following its introduction by Coons et al in 1942,[4] and it is still widely used to identify various lymphocyte subtypes, immunoglobulin deposits in renal or skin biopsies, and in the identification of many antigens detectable by monoclonal antibody systems.

However, there are several limitations in the application of immunofluorescence to routine diagnostic pathology. Immunofluorescence usually requires the collection of frozen specimens, which then must be properly stored and subsequently cut into 5- or 6-micron thick frozen sections. It also requires the use of a fluorescence microscope with a high-intensity light source and dark field condensers. This is both expensive and does not allow one to easily discern individual cellular detail or subpopulations of cells. These problems can be reduced by utilizing the paraffin-embedding method of Sainte-Marie and incident illumination.[5] However, this does not solve the problem of the additional equipment required nor the fact that fluorescent-stained frozen sections are generally not permanent preparations.

Because of all of these drawbacks, other methods have been developed, the most popular of which is the immunoperoxidase technique because it allows one to combine standard morphologic observations with the detection of antigens in routinely fixed, paraffin-embedded tissues. This article will review the applications of immunoperoxidase techniques in diagnostic laboratories and will also briefly discuss some of the newer methods being introduced.

Principle of immunoperoxidase techniques

The immunoperoxidase technique makes use of a specific antibody with a high affinity for the particular antigen in question. The binding of the antibody to the antigen in the tissue becomes visible through the use of a group of immunocytochemical procedures which result in a stained reaction product. Most commonly, the enzymatic activity of horseradish peroxidase is used in the presence of hydrogen peroxide and a chromogen; the resultant color depends on the chromogen used. The two most pop-

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Presented at the Section on Pathology, Clinical Pathology, and Blood Banking, Symposium on Recent Developments in Laboratory Medicine, Saturday, June 25, 1982.

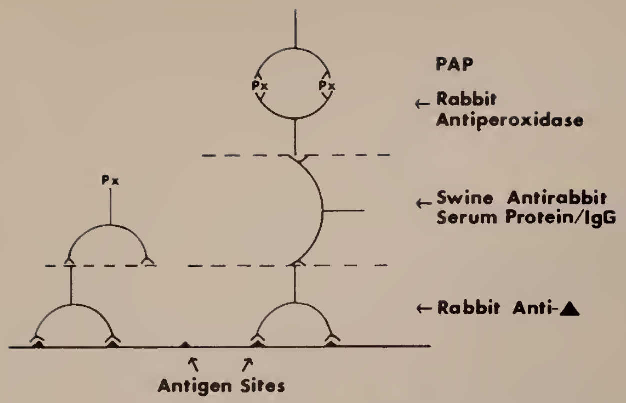

FIGURE 1. Comparison of peroxidase-labelled antibody method with unlabelled peroxidase-antiperoxidase method.

ular chromogens currently in use are diaminobenzidene (DAB), which yields a brown deposit at the site of the antigen-antibody reaction, and aminoethylcarbazole (AEC), which yields a red color at the same site.

There are two major immunoperoxidase techniques that have been widely applied in localizing antigens in tissue sections. One is the peroxidase-labeled antibody method; the other is the unlabeled peroxidase antiperoxidase (PAP) method. A comparison of these two techniques is shown in Figure 1. In both techniques the peroxidase localizes the tissue antigen by developing the sections with chromogens that act as hydrogen donors.

Immunoperoxidase techniques do not require special optical instruments since the slides can easily be read by conventional light microscopy. At the present time our laboratory predominantly uses the PAP technique.

Tissues. Immunoperoxidase techniques have been applied to various types of histologic preparations including cryostat (frozen) sections and paraffin-embedded or plastic-embedded tissues. Of these types of tissue preparation, standard paraffin-embedded tissues generally prove to be the most reliable. Frozen sections often lack the fine cytologic detail present in permanently fixed material, and there is sometimes a tendency for the antigens to be less stable and to leak into the surrounding tissues in such a preparation. With respect to plastic-embedded tissues, experience is far less extensive but most investigators feel that the results of staining such preparations may be unpredictable. Despite the type of histologic preparation, it is always well to avoid areas of hemorrhage, folds, tears, knife marks or other irregularities in the way the tissues are cut since these may lead to erroneous interpretation of the reactions.

In general, the quality of the tissue fixation is an important factor in determining the outcome of the immunoperoxidase reaction. Good fixation is an absolute requirement for accurate localization of antigens in tissues. If the tissues are poorly fixed, there is either a decrease in the antigenicity of the substances under investigation or the antigen may diffuse into the surrounding tissues giving very high background staining and imprecise localization.

Most of the standard fixatives used in hospital laboratories are compatible with the application of immunoperoxidase techniques. However, of all the fixatives, those containing mercurial compounds are generally the least suitable. We have retrieved blocks from our files from the past 30 years and have been able to stain them using these techniques once the tissues have been fixed either in Bouin's solution or 10% neutral buffered formaldehyde.

One can also perform the immunoperoxidase technique on tissues that have been decalcified if the tissues have been adequately fixed prior to decalcification. Since one can stain the old, stored paraffin-embedded material, it is possible to perform retrospective studies using various antigen-antibody systems.

Controls. Several controls have been suggested as a result of a workshop on immunoperoxidase techniques by the National Cancer Institute.[6] They are as follows:

1. Omitting the primary antibody to monitor the endogenous peroxidase activity in the tissues and to rule out nonspecific binding of the secondary antibody to the tissue sections
2. Replacing the antibody with normal serum, preferably the preimmune serum from the same animal which was immunized
3. Replacing the primary antiserum with a primary antiserum generated in the same species of animal to a different antigen
4. Absorbing the primary antiserum with the purified antigen used to generate it (This last control is the ultimate test for specificity.)

Tissue controls known to contain the antigen in question should also be included in each run to guarantee that the system is working. For example, if one is looking for thyroglobulin, a piece of normal thyroid should be included in the staining procedure.

Application and routine practice

The immunoperoxidase technique allows the diagnostic pathologist to localize specific antigenic substances in tissue sections so that one may better identify the cell of origin of a lesion, may document the presence of autoantibodies, may study the distribution of cells in a tissue producing a given antigen, may study the presence of oncofetal or tumor antigens in neoplasms, and may study the histogenesis of specific lesions. We will present a brief overview of some of the antigens commonly stained for in a diagnostic laboratory and their routine usefulness.

Immunoglobulins. The characterization of abnormal lymphoid proliferations into specific lymphocyte subpopulations is now commonly performed to assess the specific nature of the proliferation. This is generally approached by demonstrating that the lymphoid proliferations are monoclonal or polyclonal in nature, using either immunofluorescent or immunoperoxidase techniques to detect specific classes of immunoglobulins. However, the role of the immunoperoxidase technique for the identification of lymphoid cell populations has been less commonly adopted than immunofluorescence. The major contribution of the immunoperoxidase technique has been in the ability to detect intracytoplasmic immunoglobulins in fixed tissue sections. One may also wish to demonstrate immunoglobulins deposited in basement membranes of kidney or skin, using the immunoperoxidase technique.

More recently, sophisticated antisera against specific subsets of T cells and B cells have been generated by using the hybridoma technique to make monoclonal antibodies.[7] The antigen against which they are directed can be visualized by using immunofluorescent[8] or biotin-avidin labeling techniques.[9]

Enzymes. There are a number of enzymes that may be localized in tissues, the identification of which aids in the classification of certain cell types or tumors. These include lysozyme, which is a useful marker for myeloid cells and histiocytes,[10] or Paneth cells in the gastrointestinal tract. Chymotrypsin and alpha-1-antitrypsin are also effective histiocytic cell markers. Both the normal and the neoplastic histiocyte will react with antibodies against lysozyme, chymotrypsin, or alpha-1-antitrypsin.

Another commonly localized enzyme is prostatic acid phosphatase. This enzyme is present in both neoplastic and nonneoplastic prostatic epithelial cells and is therefore not useful for distinguishing benign from malignant proliferations. However, it is quite useful for determining the cell of origin for these tumors at their metastatic sites. In patients with multiple primary tumors, one of which is prostatic, the pathologist can stain the metastatic lesions with prostatic acid phosphatase to determine if a particular metastasis is due to the prostatic primary tumor or comes from another lesion. To illustrate this principle we are including the following case report.

Case report. A 65-year-old man with known carcinoma of the prostate underwent an abdominoperineal resection for a carcinoma of the rectum. The rectal tumor was predominantly well differentiated with focal solid areas that extended into the perirectal fat. Eleven lymph nodes were found in the perirectal fat, four of which contained tumor. In two of the metastatic sites the tumor was a well-differentiated adenocarcinoma. In the remaining two positive lymph nodes the metastases were composed of solid sheets of cells. This raised the possibility that two of the tumor-bearing lymph nodes contained metastases from the more undifferentiated part of the rectal neoplasm. Alternatively, the solid pattern of the metastases could have represented a metastasis from the prostate cancer. To determine which of these alternatives was true, the primary and the metastatic lesions were stained with antibodies to carcinoembryonic antigen (CEA) and prostatic acid phosphatase. The rectal tumor and the well-differentiated glandular metastasis were both strongly positive for CEA and negative for prostatic acid phosphatase. The two solid-appearing metastases were weakly positive for CEA and strongly positive for prostatic acid phosphatase. Thus, of the four lymph nodes containing tumor in the perirectal fat, two contained metastases from the rectal carcinoma and two were from the prostatic carcinoma.

Alpha-1-antitrypsin, in addition to staining histiocytes, is also an effective cell marker for liver cells, neoplasms of the liver, and germ cell tumors. In fact, in our experience, alpha-1-antitrypsin is more often positive than alpha-fetoprotein in both germ cell neoplasms and hepatomas.

Histaminase, another enzyme, is present in medullary thyroid cancers[11] as well as in a large number of oat cell cancers of the lung.[12]

Infectious agents. In many infectious and parasitic diseases, either the agents or antigens from them have been visualized in tissues utilizing the immunoperoxidase technique. These include hepatitis B antigens, amoebi, spirochetes, fungi, herpesviruses, and papilloma viruses. Of these, there is a current burst of interest in the detection of human papilloma virus antigens in flat lesions of the cervix, which have been misdiagnosed as early cervical neoplasias.[13] Immunohistochemical studies are often done in conjunction with electron microscopic investigations and have shown a correlation between the presence of the virus particle with the viral antigen.[14]

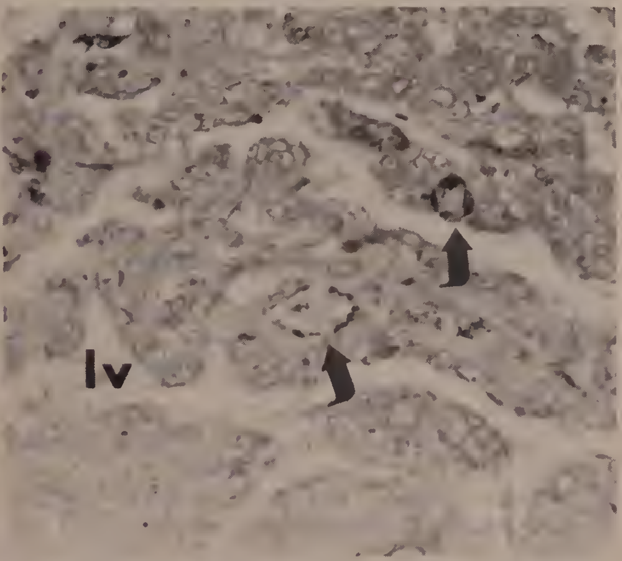

FIGURE 2. Lymphangiomyoma. Factor VIII staining showing positive vascular endothelium (arrows) and negative lymphatic endothelium (×300).

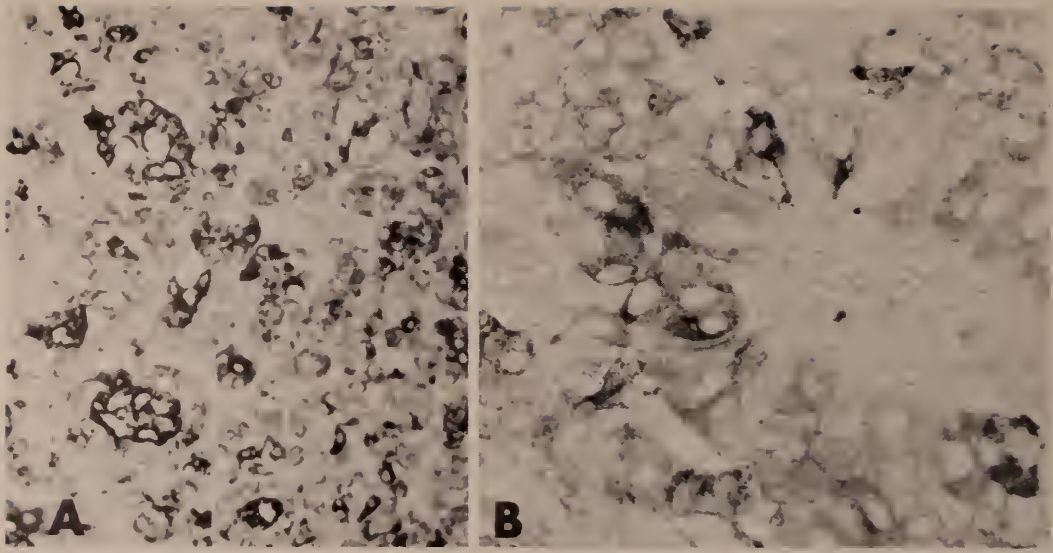

FIGURE 3. Antithyroglobulin. (A) Normal thyroid follicles staining positively (×320). (B) Positive cells in papillary carcinoma of the thyroid (×600).

Normal tissue components. There are a number of normal cellular constituents that can be detected using antibodies directed against them. In difficult diagnostic problems, it is often useful to look for such normally present tissue components. Factor VIII is a substance produced by platelets and endothelium that can be detected in endothelial cells lining blood vessels but not in lymphatics (Fig 2).[15] It is also positive in vascular neoplasms, be they benign or malignant. This is particularly useful since some angiosarcomas may resemble poorly differentiated carcinomas. Muscle myoglobin is present in normal skeletal or cardiac muscle cells and is useful in the diagnosis of rhabdomyosarcomas,[16] as well as for the detection of myoglobin in the kidney in patients with myoglobinuria.

Lactalbumin[17] and casein are normal tissue constituents produced in the breast. Neoplasms derived from mammary epithelium may also express these substances. An antigen cross-reactive with the mouse mammary tumor virus is also present in some patients with breast cancer; it is virtually specific for tumors arising at this site.[18] It is often helpful to stain metastatic lesions in the lung or lymph nodes of patients with known or suspected breast cancer with an antibody to one of the breast "markers" to guarantee that the lesion is in fact a metastasis from the breast and not a new primary lesion, or a metastasis from a second primary tumor. Glial fibrillary acidic protein is made by glial and astrocytic cells in the nervous system and is present in neoplasms derived from them.[19] Thyroglobulin is made by the thyroid follicular epithelium and is present in both papillary and follicular thyroid neoplasms (Fig 3).

Hormones. Large achievements have been made in the immunohistochemical demonstration of hormones since the original description by Marshall in 1951 on the localization of ACTH in the pituitary gland of the pig.[20] Using immunoperoxidase techniques, the localization of the hormones of the anterior pituitary gland has advanced considerably since this initial observation. Approximately a decade later, the same methods were applied to the localization of hormones in the pancreatic islets, and starting in the 1970s,[21] investigations centered around the localization of peptide hormones in the gastrointestinal tract.[22]

Anterior pituitary. The combination of the use of immunocytochemistry and electron microscopy has considerably broadened our knowledge of pituitary cytophysiology. We no longer have to rely on the division of the pituitary cells into acidophils, basophils, and chromophobes based on their staining characteristics. Using the mechanism of immunocytochemistry, it becomes easier to identify the individual hormones associated with each of these cell types (Fig 4). Similarly, it is possible to study tumors of the pituitary gland with respect to their hormone production.[23]

Gastrointestinal tract. The gastrointestinal tract may be the largest endocrine organ despite its widespread distribution throughout the length of the body. Many of the peptide hormones in the gastrointestinal tract are also present in the brain and hypothalamus.[22] These peptides include bombesin, cholecystokinin, substance P, somatostatin, vasoactive intestinal polypeptide, and serotonin. Other hormones that can be found in the gastrointestinal tract include gastrin, pancreatic polypeptide, glucagon, and glicentin. Neuroendocrine tumors arising primarily in the gastrointestinal tract often express many of these hormones. For example, carcinoid tumors not uncommonly contain serotonin, bombesin and/or somatostatin. We know that a given tumor may make more than one polypeptide hormone.[24]

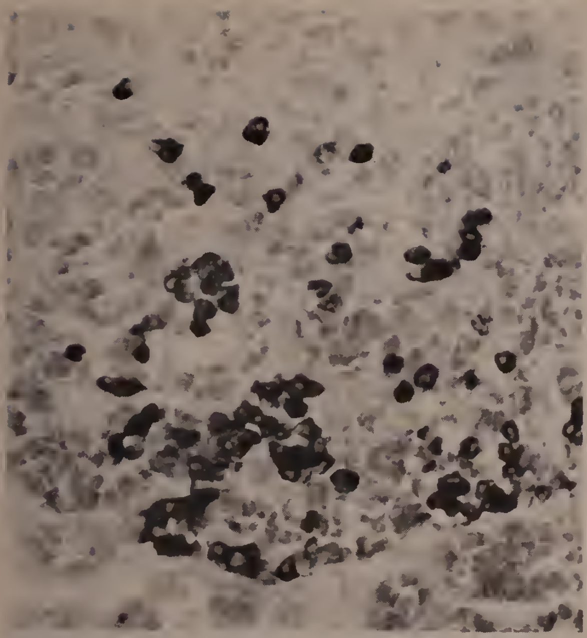

FIGURE 4. Anti-ACTH in human pituitary (×280).

Pancreas. The islets of the pancreas are composed of endocrine cells which derive from the pancreatic ducts. The beta cells secrete insulin and comprise the majority of the islet parenchyma. Somatostatin is secreted by D cells present throughout the islets whereas glucagon is secreted by A cells, at the periphery of the islets (Fig 5).

Neoplastic proliferations of islet cells create certain well-recognized clinical syndromes such as the Zollinger-Ellison syndrome in which the neoplastic cells produce gastrin[21] or the Verner-Morrison syndrome which is associated with the production of vasoactive intestinal polypeptide.[25] The production of these hormones by the tumor can be demonstrated by staining them with specific antibodies.

As with carcinoid tumors, islet cell neoplasms may produce a variety of hormones. Frequently they include insulin, glucagon, pancreatic polypeptide, bombesin, gastrin, and somatostatin.

Thyroid gland. Thyroid calcitonin is a major product of the endocrine cells of the thyroid gland. C cells are present in both parafollicular clusters as well as lining individual follicles. There appears to be an increase in the number of these cells with advancing age.[26] These are the cells which, in their neoplastic form, constitute medullary carcinomas of the thyroid. It has been recommended that analysis of C cells be done in family members of patients with multiple endocrine adenomatosis types II and III to detect those patients at risk for having a medullary carcinoma of the thyroid gland.

One can also localize thyroglobulin and thyroxine production using immunocytochemical techniques. This is particularly helpful in identifying the thyroid as the place of origin for metastatic neoplasms. One can also demonstrate the presence of these substances in ectopic thyroid sites such as in struma ovarii.

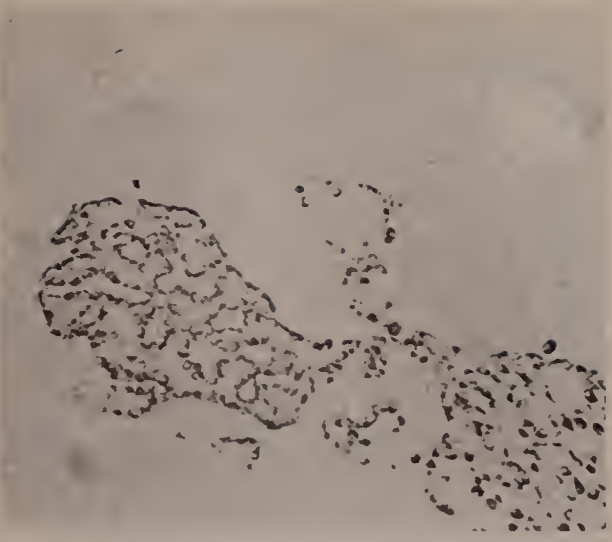

FIGURE 5. Antiglucagon staining human pancreatic islets (original magnification ×160, slightly reduced).

Ectopic hormone production. The presence of polypeptide hormones in neoplasms arising from sites not normally associated with the production of hormones has been known for some time. The best example is human chorionic gonadotropin, which may be found in numerous epithelial, mesenchymal, and lymphoid neoplasms.[28] Ectopic production of insulin, parathormone, and adrenocorticotropic hormone has also been reported. Lung cancer has always been the prototype for ectopic hormone production. These tumors have been associated with the production of adrenocorticotropic hormone, antidiuretic hormone, parathormone, insulin, glucagon, serotonin, prolactin, gonadotropins, and thyroid-stimulating hormones. One can detect these hormones in such lung neoplasms by using specific antibodies.[29–31]

Steroid hormones. There is an increasing interest in the application of immunoperoxidase techniques for the demonstration of steroid hormones or their receptors.

Estrogen, progesterone, and testosterone have been demonstrated by Taylor et al[32] in ovarian and testicular neoplasms and have been used to help classify these tumors. They may also be localized to normal tissues. More recently, the development of monoclonal techniques has yielded a reagent that makes it possible to demonstrate the presence of estrogen receptor proteins in breast cancer tissues that have been processed by routine fixation and standard embedding procedures.[33]

Oncofetal antigens. The localization of oncofetal antigens has produced an enormous literature, especially with respect to carcinoembryonic antigen. It is classically associated with carcinoma of the colon[35] (Fig 6), but it is found in many different neoplastic[34] and nonneoplastic tissues.

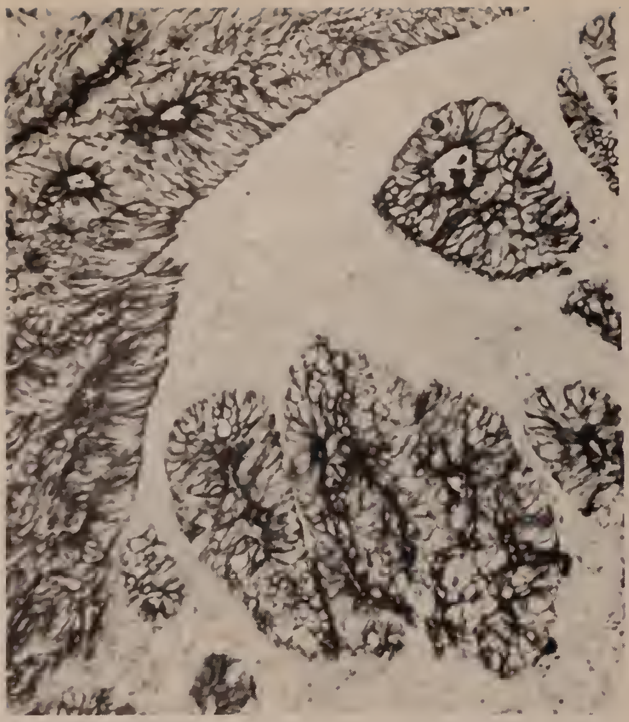

FIGURE 6. Anti-CEA staining on carcinoma of colon (original magnification ×400, slightly reduced).

Similarly, there have been numerous attempts to localize alpha-fetoprotein to both hepatomas and to germ cell neoplasms. It has been our experience in this laboratory that whereas alpha-fetoprotein is often present in such neoplasms, alpha-1-antitrypsin is more commonly encountered, as we have stated.

Newer techniques

Biotin-avidin systems. Avidin is a 68,000-mw glycoprotein with a high affinity for biotin, the binding of which is not inhibited by coupling either substance to peroxidase.[37] This application of the biotin-avidin peroxidase system holds great promise for use with monoclonal antibodies by virtue of its ability to enhance staining reactions in either frozen sections or paraffin-embedded sections. We have found* that there is an increased sensitivity in a melanoma monoclonal system using the biotin-avidin system in comparison to the more conventional immunoperoxidase techniques. This may be a very important aspect in the application of monoclonal antibodies to standard diagnostic material because the antigens being detected may be present in only minute amounts in the tissues. Biotin-avidin reactions are beginning to be applied relatively routinely in the identification of T lymphocyte subpopulation (suppressor cells and helper cells) since monoclonal antibodies to these lymphocyte subsets are now commercially available.

Staphylococcal protein A. Protein A is a cell wall constituent of *Staphylococcus aureus* that specifically binds the Fc part of immunoglobulin G. Like biotin or avidin, it can be conjugated to peroxidase without altering its binding ability.[38] It has the advantages of being a relatively rapid technique to perform, of giving little nonspecific background staining,[39] and also the very useful advantage of being able to be used with any primary antibody, regardless of the animal species in which it was generated, because of its binding affinity for the Fc part of immunoglobulin G. Thus, it too can be combined with monoclonal antibodies to yield a useful diagnostic system. It can also be used to detect antihuman antibodies, something that is otherwise very difficult to do since human peroxidase-antiperoxidase conjugates cannot be prepared.

Summary

In summary, immunocytochemical techniques are highly sensitive and specific ways that allow one to demonstrate a variety of cellular or extracellular antigens in tissue sections. The wide array of commercially available antisera has made it possible for pathologists to utilize the technique as an important diagnostic tool in understanding histogenetic or functional aspects of the diseases that they commonly encounter.

Certainly we will see an expansion of the number of commercially available antisera. These will include both the more conventional heteroantisera generated in animals and monoclonal antibodies with very restricted specificities.

Significant contributions to the field of diagnostic histopathology have been made using immunoperoxidase techniques by many more people than it is possible to quote in such a short review. However, there are clearly certain drawbacks to any diagnostic test; therefore one must understand the limitations of these immunocytochemical techniques for them to be accurately applied to diagnostic problems. It is important that each laboratory standardize the procedures and reagents used and to quality-control each test that is performed so that the results obtained will be both highly sensitive and specific and will provide a reliable, reproducible tool for use in routine diagnostic histopathology.

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Acknowledgment. The authors wish to acknowledge the secretarial assistance of Ms. Fausta Weir.

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Asymptomatic Carotid Artery Bruits

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A carotid artery bruit, caused by local atheroma, is most commonly heard over the bifurcation of the common carotid artery. This lies medial to the sternomastoid muscle at the level of the upper part of the thyroid cartilage. Auscultation here is facilitated by using a bell stethoscope rather than the diaphragm type that is now in vogue. Compression of the patent opposite carotid increases the bruit, whereas compression of the carotid below the site of auscultation abolishes the bruit. The latter also differentiates bruits originating in the vertebral or

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Presented at the Section of Neurosurgery and Neurology, Symposium on Cerebrovascular Disease: Controversies in the 1980s, on Saturday, June 25, 1982.

subclavian arteries. These are best heard in the supraclavicular area and along the posterior border of the sternomastoid. Transmitted cardiac murmurs, caused for example by aortic stenosis or mitral incompetence, are louder over the heart and lower carotid region, whereas the carotid bruit is most intense high in the neck and decreases as the stethoscope is moved towards the heart. Patients with anemia, fever, high cardiac output, or hyperthyroidism may have bruits heard diffusely over both carotid and other arteries. Auscultation does not differentiate bruits that arise from the origin of the internal carotid or distal common carotid from external carotid bruits. Toole[1] suggests that if compression of the superficial temporal, facial, and occipital arteries decreases a bruit then the stenosis is in the external carotid, whereas if this increases the bruit there is likely to be stenosis of the internal carotid. Cervical venous "hums" are continuous low roaring sounds that become louder with erect posture and disappear when the subject is supine or when gentle pressure is applied above the level of auscultation. They are commonly present in children and young adults. Best heard at the base of the neck on the right side, they are usually benign but can be associated with intracranial arteriovenous malformations.[2] Young people may also have diffuse carotid bruits that are benign.[3]

Prevalence of carotid bruits

Recent population studies have provided data on the prevalence of asymptomatic carotid bruits (ACB) in various age groups. In Evans County, Georgia, 3.5% of 1,620 persons aged 45 years or over had ACB, and a further 1% had asymptomatic bruits confined to the supraclavicular area.[4] These persons had no prior history of strokes, transient ischemic attacks (TIA), or ischemic heart disease. The frequency of bruits increased with age and hypertension. They were slightly more frequent in blacks. Similar results were reported from Olmsted County, Minnesota, where 2.9% of 509 persons aged 45 or more had ACB.[5] In these two studies the subjects were each examined on a single occasion. The Framingham, Massachusetts study followed 3,709 persons for eight years during which time the eight-year incidence of ACB was 4.6% for those aged 45 years or more.[6]

On April 1, 1980 the population of this country included slightly over 70 million aged 45 or more,[7] and the above studies suggest that about 3 million of these may have ACB. The percentage of older persons in the population is increasing, and this considerable number should be kept in mind when we consider what follow-up and investigations may be warranted.

Risk of TIAs and strokes associated with ACB

In the Framingham study 171 persons, 66 men and 106 women, with ACB were followed for up to eight years, during which time TIA or stroke occurred in seven men and 14 women. The overall age-adjusted incidence of stroke, including TIA, was 2.6 times that of persons without carotid bruit. This increased incidence was statistically significant in women. There were eight persons with TIAs but only four of these were in the distribution of carotids with bruits; the others were in vertebrobasilar or contralateral carotid territory. Only six of the strokes were infarcts in ipsilateral carotid distribution. Thus, ipsilateral cerebral infarcts occurred during this period of observation in 3.5% of the 171 persons with ACB, and a further 9% had strokes which included infarcts in other distribution and subarachnoid hemorrhage (Table I).

The Evans County, Georgia study found that over six years, ten (13.9%) of the 72 persons with asymptomatic cervical bruits developed strokes compared with 3.4% of the 1,548 without cervical bruits. Ipsilateral cerebral infarction occurred in only three persons (5.3%) among the 57 with previously asymptomatic carotid bruits. Thus, these two population studies of persons aged 45 or more reached similar conclusions concerning the risk of cerebral infarction associated with ACB. Studies were not performed to determine the state of the carotid artery. The subjects of these two investigations were unselected and probably representative of the general population, whereas the individuals in

TABLE I. Ipsilateral Carotid Infarcts Related to ACB

Study	Number with ACB	Follow-up	Infarct
Framingham	171	8 years	6 (3.5%)
Evans County	57	6 years	3 (5.3%)
Total	228		9 (3.9%)

TABLE II. Frequency of TIA and Strokes Related to ACB

	N	Follow-up	TIA	Stroke
Thompson	138	45.5 months	26.8%	17.4%
(Endarterectomy group of 132)			4.5%	4.6%
Cooperman	60	2–7 years	20%	15%
(Group of 196 with no carotid bruit)			12%	4%

several other reports were referred to surgeons and the criteria for their selection are not clear.

Thompson et al[8] followed 138 persons with ACB for a mean period of 45.5 months during which time 26.8% developed TIAs and 17.4% had strokes. The frequency of these events in 132 patients with endarterectomy was much lower, as shown in Table II. The type and site of strokes were not identified. Cooperman et al[9] reported 256 patients who had undergone surgery for vascular disease of the legs. Sixty had ACB and during the observation period of two to seven years there were TIAs in 20% and strokes in 15%. Table II indicates the lower frequency of TIA and stroke in the 196 patients without carotid bruits. Carotid investigations were not performed, and again the location of TIAs and strokes was not reported.

ACB and pending cardiovascular surgery

Fields[10] reported that when ACB were investigated and carotid stenosis corrected before major arterial reconstructive surgery in the thorax or abdomen, the frequency of stroke was reduced from 4% to "almost negligible." On the other hand, Barnes et al[11] studied 120 patients before coronary bypass or peripheral arterial surgery with noninvasive carotid tests. These showed evidence of severe carotid stenosis in 26 carotid arteries among 19 asymptomatic patients. Only ten of the 26 were associated with ACB. No patient had prophylactic carotid surgery and the cardiovascular operations were performed without perioperative TIAs or strokes. Carney et al[12] reported similar results in 248 persons undergoing aortoiliac surgery among whom carotid bruits were heard in 14%. Other authors[13,14] have advised noninvasive carotid investigations prior to all major cardiovascular operations since severe carotid stenosis may be present in the absence of carotid bruits.

Noninvasive carotid investigations

These include oculopneumoplethysmography (OPG), carotid phonoangiography (CPA), and Doppler studies.[15,16] The combined results of these methods show excellent correlation with angiography for carotid stenosis of sufficient severity to affect the rate of blood flow.

Intravenous digital subtraction angiography can image the carotid lumen and may, in some cases, obviate the need for arterial injection, which has for many years been the definitive study for lesions of the carotid arteries.

Summary of management of ACB

1. Clinical examination to exclude other cervical sounds.
2. Noninvasive carotid investigations. If results of these are negative or borderline then repeat every three to six months and consider aspirin therapy.[17-20] If positive, then consider intravenous digital subtraction angiography or arterial angiography.
3. If TIAs occur then arterial angiography for investigation of carotid stenosis and ulcerated plaques. Then consider endarterectomy[21,22] versus aspirin therapy or anticoagulation.[23]

Population studies suggest that asymptomatic carotid bruits may occur in about 3 million persons aged 45 years or more in this country, and that approximately 4% (120,000) of these may suffer cerebral infarcts within the distribution of these carotid arteries over the subsequent few years. Appropriate investigation and prophylactic treatment may prevent a high proportion of these infarcts. In addition, the investigations will identify occult stenoses that are not accompanied by audible carotid bruits, and treatment of these may prevent infarcts.

Summary

The characteristics and differential diagnosis of asymptomatic carotid bruits (ACB) are discussed. Population studies suggest that ACB may be heard in 4% of persons aged 45 or more, which is approximately 3 million people in this country. About 120,000 of these may be expected to suffer cerebral infarction within the distribution of carotid arteries with ACB. A program of management is outlined which may reduce the risk of these cerebral infarcts.

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Outpatient Management of Pain

The anesthesiologist's holistic approach

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The treatment of pain through the application of therapeutic nerve blocks dates to the use by Alexander Wood in 1855 of the hypodermic syringe and needle for the relief of neuralgic pain with opium and morphine, where the drug was injected into the painful area. It was in 1941, however, that Rovenstine and Wertheim published their paper on Therapeutic Nerve Block in the *Journal of the American Medical Association.*[1] At this early date, Rovenstine recognized that neurolytic analgesic nerve blocks had eclipsed by far similar procedures employed to cure or alleviate pain resulting from disease or injury. Rovenstine decried the fact that, while the value of local anesthetics and neurolytic agents had long been known for the relief of chronic pain, their use was long in coming into acceptance.

At New York University, Rovenstine established a nerve block clinic for the treatment of some of the more common pain syndromes. This was essentially the beginning of anesthesiologists' interest in pain management. Rovenstine's clinic became known throughout the United States for the use of nerve blocks for the treatment of pain and served as a model for those with an interest in modifying intractable pain disorders. However, World War II, with its demands on medical manpower, delayed for a time the proliferation of pain clinics throughout the United States.

Bonica became interested during and immediately following World War II in the treatment of chronic pain based on his wartime experiences with painful causalgias resulting from high-velocity missile injuries. It was not until 1961, however, that Bonica, in collaboration with Dr. Lowell White, a neurosurgeon, was able to put together his concept of group management of chronic pain problems.[2] A small group began to see patients with chronic pain and held regular weekly conferences. As the patient load grew, the group gradually attracted orthopedists, psychologists, surgeons, and other specialists.

It was Papper in 1951 who first stated that pain should be considered as a disease entity rather than a symptom of the disease so that a more intelligent plan of attack could be developed.[3] He was the first to suggest that many patients with pain might be temporarily relieved of their symptoms, but that blocks might not effect a cure of the cause. He recognized that attempts to minimize or abolish the psychologic overlay associated with pain were definitely useful. In the decades between 1950 and 1970, there are sporadic reports of pain clinics throughout the world. McEwen and coworkers from Sydney, Australia, established a pain clinic in 1962, and, over the ensuing two years, saw a total of 107 patients.[4] They, too, combined the opinions of psychiatrists, neurosurgeons, radiotherapists, and anesthetists in the objective evaluation of patients referred for therapy. They emphasized the fact that all pain was real to the patient, although the physician might be perplexed that there was a functional or psychogenic element to the pain.

In 1972, Swerdlow[5] reported on his experience in the management of chronic pain patients over the previous several years and concluded that a pain clinic conducted by a single consultant such as an anesthetist was capable, at a preliminary interview, of determining whether treatment should be of the nerve block variety or whether the patient should be referred to a consultant of another discipline.

It is evident, therefore, that the role of the anesthesiologist in the management of pain has advanced from the simple chemical interruption of pain pathways to a more comprehensive approach to the overall management of the psychosocial as well as the physical manifestations of the pain disorder.

Presented at the Section on Internal Medicine, Joint Meeting with the New York State Society of Internal Medicine, Symposium on Management of Pain: Concepts, Controversies, and Contemplations, on Saturday, June 25, 1982.

Pain Clinics

The American Society of Anesthesiologists in 1977 published a directory of pain clinics listing 273 institutions in the United States of which 42% were of the multiple discipline type, 35% were modality-oriented (primarily nerve block), and the remaining 23% were syndrome-oriented (back pain, headache, orofacial pain). Of these 273 pain clinics listed in the United States, 41% were directed by anesthesiologists, with no more than 10% headed by any other specialty. It is true that most of the clinics headed by anesthesiologists function more as a pain service performing nerve blocks on request rather than as a comprehensive group effort. At the other extreme, some anesthesiologists are intimately involved as directors of comprehensive multiple discipline clinics, among them some of the most impressive models in this country.

The University of Washington at Seattle still serves as the model for the inpatient multidisciplinary pain clinic.[2] It is composed of representatives of 13 disciplines and is directed by the Department of Anesthesiology. The goals and missions of this group are: (1) to work as a well-coordinated team to provide optimal care to patients with chronic pain problems; (2) to carry out an effective teaching program for undergraduate, graduate, and postgraduate health care professionals; and (3) to encourage independent and collaborative basic and clinical investigation. More recently, it has expanded into a pain center, with separate clinical and research divisions. Each patient admitted is assigned a physician, the patient's manager, who has the responsibility for the initial evaluation of making decisions as to which consultants the patient should be referred. He also coordinates those consultations and acts as liaison between the patient, the patient's personal physician, and the remainder of the clinic group. Consultants or individual medical specialists, usually members of the clinic group, will devote a significant portion of their clinical time to the care of patients with chronic pain.

Following evaluation, those patients who may be treated with the use of therapeutic blocks, neurosurgical procedures, or other physical measures have these performed on an individual basis. Those patients with drug habituation, marked disability with minimal physical findings, and those with special problems are referred for inhospital treatment and behavior modification over a 3- to 12-week period. During this time, emphasis is placed on detoxification, medication on schedule on a decreasing basis to prevent rather than treat pain, physical conditioning, individual and group therapy, and techniques calculated to "unlearn" chronic pain behavior.

Because of the expense involved in extensive inpatient therapy and the necessity for the management of a large group of patients without the financial resources for prolonged hospitalization, an outpatient model was developed at the University of Virginia Medical Center in 1970. This clinic has subsequently become the model for most outpatient clinics in the United States. While the attending physician assumes the responsibility for the patient's improvement, according to the in-patient model, in the outpatient model the responsibility for improvement is placed upon the patient. Unless adequately motivated, all chronic-pain patients will fail to improve. The necessity for detoxification, therefore, is explained to the patient and he or she is provided with schedules to become drug-free. The patient is instructed in physical therapy programs and activity schedules. Biofeedback and other neuroaugmentative procedures and psychologic and social counselling are continued on an outpatient basis utilizing existing facilities and resources in the patient's own community.

Invasive procedures are few, usually limited to the more acute problems seen in a university setting. Neurodestructive procedures are relatively uncommon and usually limited to patients with malignant conditions. Pharmacologic protocols without the use of sedative or depressant drugs have been established for the management of pain of central origin, malignant conditions, and chronic neuritis and neuralgia.

It would appear that the physical facilities of a pain center are only secondary in importance to the time spent with and interest shown in the patient's problems, and in discussions with the patient of the source of his difficulty, expectations for the future, and the provision of assistance and solution of socioeconomic and psychologic problems. Whereas the inpatient model is expensive, ranging in hospital costs of up to $1,000 per day, the outpatient model can achieve the same results at far less cost. This maintains the patient in his own environment rather than a controlled hospital setting, the security of which he must leave on discharge from the institution.

The last 40 years have shown essentially little change in the primary management of acute pain, but considerable progress is being made in understanding and treating chronic pain disorders. Perhaps it is fortuitous that the anesthesiologist is still the first physician to evaluate the chronic pain patient, since he is cognizant of the untoward effects of drug habituation through his anesthetic experience and is nonsurgically oriented. Therefore, he is not tempted to "explore to look for the source of pain." The properly trained anesthesiologist will limit his ministrations to the patient to the management of those pain disorders within his area of expertise, and the extent of his expertise is dictated only by his interest in understanding all of the factors contributing to chronic pain behavior.

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A Bull in the China Shop

The internist and the high-risk pregnancy

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When should specialists in internal medicine get involved with the management of the pregnant patient? Not so very long ago most of us would have said almost never. The rare exceptions were those pregnant patients with illnesses exclusively managed by internists or with catastrophic or unusual problems requiring special equipment or multiple consultants. The fact is that 30 or 40 years ago most women with serious medical diseases did not get pregnant or did not stay pregnant long enough to force internists to learn much about the physiology and pathophysiology of pregnancy. Internists knew less about pregnancy than obstetricians knew about internal medicine and probably were more of a hinderance than a help. Hence, the title of this article: A Bull in the China Shop.

For many reasons, there is now a real need for internists to learn about the interrelationship between pregnancy and medical illness and to become more active participants in the management of pregnant patients. The epidemiology of pregnancy has been changing so that women previously not surviving to reproduce or previously advised against reproducing are now doing just that. Patients with juvenile onset diabetes mellitus, congenital or acquired heart disease, and chronic renal failure live long enough and well enough to conceive. There has been an increase in the rate of first-time pregnancies in women over 30 and some dramatic changes in the infectious diseases occurring in sexually active women. These medical problems, combined with pregnancy, pose special challenges to obstetrics and internal medicine: challenges best met by a unified approach. The nature of the patient makes it imperative that internal medicine and obstetrics collaborate. The collaboration must include a common approach to the advice given to women with medical problems contemplating pregnancy as well as the development of an effective team to care for the patients who carry the high-risk pregnancies.

Throughout this article I will refer to "we" and "our," plurals that require explanation. The Children's Hospital of Buffalo is a pediatric and maternity hospital. There is no need or room for a freestanding, full-scale department of internal medicine except to provide services, teaching, and research support for obstetric and adolescent medicine services. Our job as internists in this setting is to study and to help take care of people in transition: reproducing women and children growing into adults. My department has no turf on its own. Everything is done in close collaboration with the obstetric and pediatric faculty, attendings, and house staff. The management protocols and research projects that are mentioned as "ours" are the results of a unique collaboration between obstetricians, pediatricians, and internists. Obviously, I think this approach to the high-risk pregnancy has merit and should serve as a model.

Interaction of pregnancy and medical illness

A brief exhortation such as this can only present some of the important events in women afflicted by the combination of pregnancy and medical illness. I have picked five physiologic trends produced by pregnancy to illustrate this discussion because they have special importance to the physicians caring for such patients (see Table). Their importance is reflected on preexisting medical problems, their effects on physiologic and biochemical measurements necessitating a change in what we think of as normal, the capacity of these events to produce signs and symptoms in the absence of medical disease, and their capacity to establish disease predispositions characteristic of the gravid state.

Pregnancy is characterized by an increase in circulating blood volume, a diminution in the tone of muscles and connective tissues with a corresponding reduction in wall tension of many structures, and an increased production of almost all the serum proteins known to be synthesized in the liver. The fetus and placenta are responsible for the fasting hypoglycemia and hypoaminoacidemia characteristic of pregnancy whereas the placenta appears to be the principal cause of the insulin resistance that produces gestational diabetes mellitus.

Presented at the Section on Obstetrics and Gynecology, Symposium on Perinatal Aspects of the Very Low Birth Weight Infant, on Friday, June 25, 1982.

TABLE I. Physiologic Events During Pregnancy Influencing Clinical Conditions of Interest to Internist

Events	Effects
↑ Blood volume	1. ↑ Glomerular filtration rate
↑↑ Plasma volume ↑ RBC volume	2. ↓ Measurements of BUN, creatinine, uric acid, albumin
	3. ↓ Total calcium
↓ Tension in walls of all tubing	4. ↑ Binding proteins with changes in usual thyroid tests
↑ Protein production by liver	5. Alterations in distribution and protein binding of drugs
Fasting hypoglycemia and hypoaminoacidemia	6. ↓ BP
Placenta-induced insulin resistance	7. ↓ Airway resistance with tendency to hypocapnia and symptoms of hyperventilation
	8. Dilatation of renal pelves and ureters.

Within three months of conception four of these five trends are well established; insulin resistance develops later in pregnancy as the placenta reaches full metabolic capacity. There is an increase in the total blood volume with a greater increase in plasma volume relative to red blood cell mass so that the measurement of packed cell volume is diminished. There is a generalized relaxation of wall tension in just about every tube in the body so that peristalsis in the gut and ureters loses some of its propulsive effectiveness yet flow through blood vessels and bronchi is facilitated. Pregnancy is a low-resistance, high-flow state as far as human tubes are concerned. The clinical manifestations of this state include a characteristic drop in systolic and diastolic blood pressures, improved pulmonary flow rates with a tendency to hypocapnia, increased renal blood flow and glomerular filtration rate, and increased susceptibility to urinary tract infections.

Cardiopulmonary changes

The cardiac output in pregnancy is increased 30% to 50% above the resting nonpregnant level. This is accomplished by the aforementioned expansion of blood volume, more rapid heart rate, and a reduction in after load or peripheral arterial resistance.[1,2] The cardiovascular effects of pregnancy are most likely to cause problems for patients with fixed obstructions to blood flow or with noncompliant vascular tubing unable to handle the increased volume. Women with mitral or aortic stenosis, pulmonary vascular hypertension as in Eisenmenger's syndrome, and significant peripheral arterial resistance from long-standing hypertension are at risk for problems with maintaining adequate flow to the uterus and conceptus or with cardiac failure. In the absence of prior congestive heart failure, women with high-flow lesions such as mitral regurgitation and atrial septal defects, as opposed to fixed, high-resistance lesions, tolerate pregnancy pretty well. Similarly, the increased cardiac demands of labor and delivery are tolerated well by women with compliant cardiac muscle and free-flowing communications between cardiac chambers, even though there may be leaks, whereas noncompliance and obstruction to flow are likely to cause problems.

The hemodynamics of pregnancy are nicely illustrated by lesions of the mitral valve. Mitral stenosis presages difficulties during gestation and delivery and the tighter the stenosis the greater the risk of serious problems. The stenotic mitral valve limits the rate of flow from the left atrium to the left ventricle. Filling of the ventricle is improved by prolonging diastole or by increasing the left atrial pressure. Tachycardia and an increase in the circulating blood volume may not be tolerated. If left atrial pressure is increased sufficiently, acute pulmonary edema and pulmonary vascular hypertension will result. Pregnancy with its increased circulating blood volume and increased heart rate may unmask previously compensated mitral stenosis or may precipitate life-threatening cardiopulmonary events. The effects of beta-adrenergic drugs, such as ritodrine hydrochloride, used to suppress premature labor may exacerbate the adverse effects of gestation on obstructive cardiac lesions. The diastolic filling time and ventricular filling are so reduced by the inevitable tachycardia that acute pulmonary edema and profound hypotension can be produced.

We have found that careful cardiopulmonary evaluation early in pregnancy with the idea of preparing the patient and the maternity suite staff for potential problems, including the use of flow-directed pulmonary arterial catheters, very helpful in patients with significant cardiac disease, especially valvular or congenital stenoses. Circumstances disposing to reduction in stroke volume almost always prompt admission, and if the obstetric and medical teams are nervous enough, we use central pressure and electrocardiographic monitoring.

I am impressed by the frequency of the following constellation of symptoms and findings during pregnancy: breathlessness, paresthesias, lightheadedness, near syncope or syncope, and a systolic murmur. I suspect that I am impressed because a substantial number of patients are referred to our department to evaluate these complaints. More often than not they mean something. The symptoms of mitral valve prolapse and idiopathic hypertrophic subaortic stenosis (IHSS) and the hyperventilation syndrome may be identical. What I call the triple *S* syndrome—shortness of breath, syncope, systolic murmur—requires a careful medical evaluation and collaboration between the obstetrician and internist.

An instructive case demonstrates the frightening potential of poor medical-obstetrical communication and cooperation.

Case report. A 23-year-old woman was admitted to our hospital a month ago, at 33 weeks' gestation by dates and 35 weeks' gestation by ultrasound, because of premature labor. She was started on ritodrine. The contractions stopped. Her pulse rose to 130 to 140 beats per minute, and she developed substernal chest pain, diaphoresis, and symptomatic hypotension, which prompted a hurried request for a medical consultation. The systolic murmur was hard to miss, and it diminished with isometric exercise. Moreover, she told everyone that she had had heart murmur since birth. In fact, she had been evaluated at age 17 even though she was asymptomatic and told that she had idiopathic hypertrophic subaortic stenosis after an echocardiogram was performed. She also told us that she had had two episodes of near syncope during the pregnancy and several episodes of prominent heart action and palpitations when both supine and standing.

The obstruction to left ventricular ejection in this condition is produced by asymmetric hypertrophy of the myocardium making up all or part of the subvalvular aortic outflow tract. The severity of the "stenosis" can be exaggerated by conditions that increase myocardial contactility, like use of adrenergic drugs; or that reduce diastolic volume so that the walls of the ventricular outflow tract are closer together at the start of systole; or that increase the rapidity of ventricular emptying as with diminished peripheral vascular resistance, thus allowing the muscular walls of the outflow tract close together sooner. In contrast, beta-adrenergic blockade reduces the rapidity and force of the myocardial contraction, and beta-blocking drugs are the preferred drug therapy for IHSS. Increasing peripheral resistance, as with the increased blood pressure produced by isometric exercise, increases the afterload on the left ventricle and slows the ventricular emptying because the ventricle has to reach a higher pressure in order to eject its stroke volume. This forces the outflow tract walls apart for a longer time, allowing for more complete ventricular emptying. Hence, when we made her do a hand grip the murmur began later in systole and became softer, a characteristic of IHSS.

With these basic hemodynamic facts, we can arrive at an explanation for the cardiovascular events during this patient's pregnancy and a rational approach to managing future pregnancies. First, the episodes of near syncope and palpitation, especially when supine, represent the exaggerated effects of the reduction of venous return and thus ventricular filling produced by inferior cava obstruction by the uterus. Such a decrease in left ventricular end-diastolic volume would increase the effect of the muscular stenosis. Second, the reduction in peripheral arterial resistance, most marked during the second trimester, diminishes the left ventricular afterload and promotes more rapid closure of the ventricular outflow tract thus increasing the muscular stenosis and reducing the effective stroke volume causing orthostatic symptoms. Third, adrenergic tocolytic drugs increase myocardial contractility and subaortic muscular stenosis. They also decrease peripheral vascular resistance and left ventricular afterload and increase the heart rate, reducing ventricular filling. The result was hypotension and angina.

Fortunately, this patient had no electrocardiographic or enzyme changes of myocardial infarction and went on to deliver a healthy 4-lb 9-oz infant after the ritodrine was stopped. She was given antibiotic prophylaxis for infective endocarditis. Our reply to her questions about future pregnancies included assurances that pregnancy was not contraindicated, recommendations for careful management by both obstetrics and internal medicine, simple postural practices to reduce caval compression and orthostatic changes, and cautions about more judicious selection of drugs. In the future she should automatically be considered a high-risk pregnancy.

Systolic murmurs are so common in pregnant women that it is easy to overlook their hemodynamic significance. Our notion of the pathogenesis of infective endocarditis is based on the fluid mechanics of turbulent flow produced by liquid moving from a high- to a low-pressure state. Simple flow murmurs across healthy pulmonic aortic valves are not indicators of high risk for intravascular infection; however, mitral regurgitation produced by a prolapsing mitral valve leaflet is presumed to be an important risk factor. We have found a surprisingly high frequency of mitral valve prolapse in patients referred for heart murmur evaluation during pregnancy. I suspect that the hemodynamics of gestation, especially the reduction in venous return produced by uterine compression of the inferior vena cava, serve to unmask a preexisting condition. Echocardiography is helpful in establishing the diagnosis of mitral valve disease and in deciding whom among murmur patients should be given antibiotic prophylaxis. We generally recommend a combination of a beta-lactam antibiotic and an aminoglycoside such as ampicillin and tobramycin sulfate. In penicillin-allergic patients we use vancomycin and an aminoglycoside. The antibiotic combination is aimed at gram-positive cocci, especially the enterococcus, and aerobic gram-negative bacilli. Anaerobes are an exceptionally infrequent cause of endocarditis. Furthermore, endocarditis prophylaxis is truly short-term: we give antibiotics solely to suppress bacteremia and, therefore, the drug should be given just before bacteremia is likely to occur, for one or at most two doses.

Many women complain of episodes of lightheadedness, paresthesias, vague anterior chest discomfort, and palpitations during pregnancy. Occasionally, syncope and carpopedal spasm are part of the syndrome. Pregnancy produces a decrease in airway resistance with increased airway conductance and an increase in tidal volume and alveolar ventilation. The normal gravid state is characterized by alveolar hyperventilation compared to the normal nonpregnant state.[3] There is a reduction in arterial PCO_2 from 40 mm Hg to 30 mm Hg. Pregnant women are always on the brink of hyperventilation symptoms. The propensity to hyperventilation syndrome may serve to uncover previously undetected mitral valve prolapse or IHSS since the clinical manifestations of these conditions are so similar. The pregnant woman with a systolic murmur having episodes of hyperventilation, near syncope, or syncope deserves a careful evaluation by her internist, including echocardiography.

Hypertension

Hypertension in the pregnant patient is the subject of heated, often unenlightening debate between internists and obstetricians. The heat seems to be proportional to our lack of understanding about the genesis and regulation of blood pressure in the normal, hypertensive, or pregnant state. Pregnancy reduces the tonicity of all tubing, but there appears to be a specific reduction in the responsiveness of blood vessels to angiotensin,[4] reduction which may be mediated by increases in the production of vasodilating prostaglandins. Even women with preexisting essential hypertension will have a decline in arterial blood pressure, especially during the second trimester. Towards the end of pregnancy the blood pressure in all women tends to return toward prepregnancy levels.

Toxemia is associated with the abolition of the unresponsiveness to angiotensin. The return to angiotensin sensitivity may precede the classical clinical preeclampsia by several weeks or months. It is not at all clear to me that the generalized vasospasm of toxemia is caused by a reduction in vasodilating prostaglandins. Clearly, many other factors may be involved such as an increase in the production of vasoconstricting prostaglandins or altered receptor sites for substances which affect prostaglandin and angiotensin synthesis or action. Suffice it to say that toxemia is a condition unique to pregnancy and the old clinical adage that delivery is the specific treatment has not been proved wrong. Regardless of this truism, the clinician is regularly confronted with the problem of how to care for the pregnant patient with hypertension.

For practical purposes we have established a empiric approach which seems to work reasonably well. We use two categories of hypertensive disease complicating pregnancy: hypertension antedating or likely to have existed before conception and hypertension developing during pregnancy. We treat all women with hypertension developing during pregnancy as if they had toxemia, recognizing that some of them have underlying or preexisting hypertensive disease. Any woman with normal blood pressures in the first two or three antepartum visits who develops an increase of blood pressure—systolic, diastolic, or both—in excess of 20 mm Hg is placed in a high-risk category. We follow these patients frequently and our threshold for hospitalization is very low. For patients close to term our efforts are directed at stabilizing the patient's medical condition in as conservative a fashion as possible and effecting delivery. Patient's remote from term are admitted and put to bed. Bed rest makes a difference. If the blood pressure and edema do not respond to bed rest and the serum uric acid rises, we add antihypertensive agents that produce vasodilatation. We do not use diuretics because of the as yet unproved possibility that cardiac output and uteroplacental blood flow in edematous preeclamptic woman will be seriously diminished. The thiazide-type diuretics and furosemide are known to produce vasodilatation and act on calcium fluxes: a role for these drugs in the management of pregnancy-induced hypertension may yet emerge. At present we reserve diuretics, almost always furosemide, for the patient with evidence of serious fluid overload, congestive heart failure, or hypertensive crisis where synergistic antihypertensive therapy is essential. All else failing, delivery is recommended. It is important to stress that once delivery is accomplished the need to protect uteroplacental blood flow is abolished and patients with fluid overload that may predispose to congestive heart failure require vigorous medical management including diuretics. The involuting uterus may act like the amputated leg in a patient with congestive heart failure: a lost "well" for blood and edema fluid.

In the past three years we have had no maternal deaths due to toxemia in 12,000 deliveries. I do not think this is because of our medication choices. I think this is because we monitor closely and conscientously, hospitalize early, treat vigorously, and "give up easily"; in other words, deliver promptly if conservative medical management is not working.

The patient with preexisting hypertension is monitored as closely as the patient whose blood pressure goes up during pregnancy. However, we continue the antihypertensive therapy and do not stop it unless there is a good reason to do so, such as orthostatic hypertension or a pressure consistently less than 120/80 and no sign of end organ problems due to hypertension (ie, normal fundi, EKG, and so forth). We prefer to maintain pregnant women with established hypertension on thiazide diuretic and a beta-blocking agent, especially metoprolol tartrate. If third-trimester exacerbation of hypertension develops in a previously well-controlled hypertensive patient, we manage her exactly like the toxemic patient. We do not discontinue the established antihypertensive regimen, we add to it. We certainly do not discontinue her diuretics.

The fact is that thiazide diuretics were used extensively in obstetric practice 20 years ago. We treated edema and blood pressure with the expectation that we could reduce the risks of toxemia. Of course, nothing of the sort happened. On the other hand, there was not an epidemic of growth-retarded babies because of reduced uteroplacental blood flow. The extensive use of thiazide diuretics during pregnancy two decades ago, in fact established their clinical safety and makes me especially nervous about doomsday proscriptions of diuretics to manage hypertension and fluid overload during pregnancy.

Biochemical measurements

Three pregnancy-related physiologic trends affect the biochemical tests we use in daily practice: (1) the increase in plasma and total blood volume, (2) an increase in hepatic production of protein and lipids, and (3) an increase in the glomerular filtration rate. The unwary physician may interpret results of an SMA-12 or thyroid function tests according to norms established for nonpregnant adults and wrongly assume that the pregnant patient is hyperthyroid or has hyperlipidemia or has normal renal function.

Despite an increase in hepatic protein production there is a fall in the concentration of serum albumin because of the expanded plasma volume and increased turnover of proteins. The decrease is usually not more than 1.0 g/dL. The usual serum albumin is about 3.0 g/dL, well below the nonpregnant normal value but normal for pregnancy. There is a corresponding drop in the plasma colloid oncotic pressure, which may contribute to the ease of edema formation, and there is a corresponding decline in the total serum calcium to a range of about 8 mg/dL. The apparent hypocalcemia reflects the drop in calcium-binding proteins so that the total serum concentration of calcium falls but the amount of free or ionized calcium remains normal.

The production of thyroid hormone-binding proteins, especially thyroxine-binding globulin (TBG), is increased in pregnancy.[5] However, the concentration of TBG is increased and not decreased as is the case with serum albumin. The total amount of circulating thyroid hormones (T_4 and T_3) is, therefore, increased. A similar increase is seen with the administration of estrogens to nonpregnant adults. The quantity of free or metabolically active thyroid hormone is not increased so that even though the serum T_4 is elevated, the patient is clinically and biochemically euthyroid.

The current commonly used screening tests for thyroid function are the total T_4 measured by radio immunoassay or by competitive protein-binding displacement, and the radioactive T_3 uptake. In pregnancy the total T_4 will be increased and so will the amount of T_3 binding because of the increases in thyroid hormone-binding proteins. The interpretation of the T_4 and T_3 uptake test results can get confusing depending on how the laboratory reports the T_3 uptake. We have found that some clinical laboratories are measuring the free T_4 accurately and relatively inexpensively. In fact, the free T_4 test costs about as much as the T_4 and T_3 uptake combined. Because of its simplicity and reasonable costs we have become accustomed to using only the free T_4 test to follow patients with thyroid disease during the course of their pregnancy.

Amplification of hepatic metabolism is reflected in the progressive rise and concentration of serum lipids throughout gestation. Serum cholesterol levels of 325 to 350 mg/dL are not unusual and do not reflect a genetically determined hyperlipoproteinemia predisposing to premature coronary artery disease. The increased turnover of cholesterol is reflected in changes of bile salts. Occasionally patients develop intense pruritus when intrahepatic cholestasis induced by pregnancy occurs.

Because of the increased plasma volume and increased glomerular filtration rate there is a substantial reduction in the BUN and serum creatinine concentrations. Normal levels for these substances in pregnancy should be about half the lower limit of normal for a nonpregnant adult woman. The endogenous creatinine clearance increases from a nonpregnant normal of about 100 mL/min to 150–160 mL/min. The point is that a "normal" BUN, creatinine, or creatinine clearance in a pregnant woman is abnormal and signifies serious underlying renal disease. Pregnancy serves to expose renal disease that might otherwise go undetected. Such patients should be seen during pregnancy and followed after pregnancy by their internist.

Uric acid is filtered at the glomerulus, reabsorbed, and then secreted by the renal tubule. The serum uric acid concentration reflects both glomerular and tubular function and, because of this, is a remarkably useful and reliable indicator of vasospastic disease of pregnancy—toxemia. The efferent arteriole from the glomerulus divides into branches which supply the renal tubule. Arteriolar spasm of the tubular blood supply produces impaired uric acid secretion without measurable changes in the glomerular filtration rate and substances like the BUN and creatinine. In toxemia the uric acid often begins to rise before changes are measured in the BUN and creatinine. Moreover, progressive elevation of the serum uric acid concentration, despite stable levels of urinary protein losses and serum creatinine, signal worsening vasospastic disease.

During pregnancy, the SMA-12 contains a wealth of information which is of use to both the obstetrician and internist. Proper interpretation is an enormous benefit to the pregnant patient for management of pregnancy-related diseases and for the detection of disease which may influence the patient's reproductive capacity and future nonpregnant well being. Unless we are prepared to examine and interpret the SMA-12 or biochemical profile results carefully, these laboratory tests should not be routinely performed. We waste a lot of our patient's money and blood by not paying attention to the effects of pregnancy on biochemical test results.

Carbohydrates and insulin

Changes in carbohydrate and insulin metabolism are among the most striking events produced by pregnancy.[6–8] The fetus, via the placenta, insures an adequate supply of growth requirements, sometimes at the expense of the mother. Glucose is passively but freely diffusible across the placenta so the maternal and fetal blood glucose levels are no more than 10 to 15 mg/dL apart. Amino acids, important both for protein construction and gluconeogenesis, are actively transported, so that fetal blood amino acids exceed those of the mother. In the fasting state, the mother will tend to have a lower blood glucose and blood amino acid level than in the nonpregnant state. In order to maintain energy supplies, the mother may switch to fat catabolism with a concomitant production of ketone bodies. Symptomatic hypoglycemia may be a prominent early symptom of pregnancy in women with impaired insulin homeostasis: type 1 (insulin dependent) or type 2 (insulin resistance) diabetes mellitus.

Somewhere around the 20th week of gestation, placental size and metabolism are sufficient to produce increasing insulin antagonism. The mechanism for gestational insulin resistance is probably multifactorial, although placental hormones such as placental lactogen (HPL) seem to play a major role. Regardless of the mechanism, the mother, in order to maintain glucose homeostasis, must secrete increasingly larger amounts of insulin in response to feeding. The average blood glucose level in the fed state tends to be higher, even in normal patients. Some women are unable to produce enough insulin or to produce the insulin in a timely enough fashion to maintain appropriate glucose homeostasis. These women are the Class A or gestational diabetics.

The diagnosis of gestational diabetes is the only real indication for glucose tolerance tests in present day medical practice. Fasting blood glucose levels are lowered by pregnancy, and glycosuria may be the result not of hyperglycemia but of the increased glomerular filtration rate, such that the glucose load presented to the renal tubule is in excess of the tubular transport capacity. The results of the oral glucose tolerance test must be interpreted in the light of normal pregnant physiology: the fasting blood glucose level should be lower, and the one- and two-hour levels are expected to be higher. Moreover, monitoring the pregnant diabetic patient must be done by testing blood glucose levels since urine glucose tests are unreliable. We continue to have our diabetic patients test their urine but we are most interested in whether or not they have ketonuria.

More complex proteins like insulin do not cross the placenta. The fetus begins to produce its own insulin around the tenth week of pregnancy. Fetal insulin secretion will be stimulated by maternal hyperglycemia and, because insulin is a growth-promoting hormone, poorly controlled maternal blood glucose levels can result in striking fetal macrosomia. Women with long-standing diabetes have vascular changes that reduce the efficiency of the uteroplacental blood supply, and despite the stimulus of maternal hyperglycemia, they are much more likely to have small rather than large babies.

There are several practical points to be made. First, in the established diabetic, hypoglycemia episodes may signify pregnancy, not poor compliance. Second, because of the tendency to fasting hypoglycemia and hypoaminoacidemia and the propensity for feeding-induced hyperglycemia even in normal pregnancies, all pregnant patients should be encouraged to adopt a diet of the type recommended by the American Diabetic Association, with frequent small feeds as opposed to less-frequent large meals. Third, the diagnosis and management of diabetes during pregnancy requires blood glucose measurements. Fortunately the state of technology allows women to test their own blood glucose levels simply, reliably, and frequently at home so that regulation of insulin doses becomes a simple rather than a complicated task. Fourth, because pregnancy is a 24-hour-a-day affair, blood glucose controls should be a 24-hour-a-day affair. Maternal hyperglycemia for only six or eight hours a day appears to be sufficient to produce fetal macrosomia. Fifth, good blood glucose control makes a difference: better babies and healthy mothers. Sixth, the internist needs to be involved in the management of diabetic patients when they are pregnant both for his or her sake and for the patient's benefit. The management of the pregnant diabetic is strikingly different from the management of nonpregnant diabetics. Internists stress the importance of maintaining stable weight and stable insulin doses; and we tend to accuse our patients of noncompliance, of being bad patients, when they gain weight, need changes in insulin doses, have hypoglycemic or ketotic episodes. However, during pregnancy we want the patient to gain weight and we expect their insulin doses to change dramatically, not because they have been noncompliant but because they are pregnant. Pregnancy requires a major change in the patient's and internist's thinking about her disease. Failure by internists and obstetricians to comprehend the magnitude of this change in thinking can produce serious psychologic as well as metabolic distress.

Closing comments

There has not been time to talk about some of the intriguing aspects of medically complicated pregnancies like caring for the pregnant women with brain death, pregnancy in patients with leukemia and lymphoma, the diagnosis of toxic shock syndrome in mother and neonate, and the use of insulin infusion pumps. The fact is that the management of these problems is based on a sound knowledge of the pathophysiology of the pregnant and nonpregnant state. The internist can contribute to the prevention of perinatal problems by working closely with the obstetricians to minimize the deleterious effects of medical disease on the mother and the fetus and by recognizing that advances in medical care have created a new group of reproductively active but high-risk obstetric patients. It is imperative that pediatricians and internists prepare themselves for this task. To do it we will need to learn a tremendous amount from our obstetric colleagues.

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The following articles were presented at the Annual Continuing Medical Education Assembly of the Medical Society of the State of New York, in Niagara Falls, New York in 1981.

Occult Neurologic Effects of Alcohol on Brain and Fetus

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Despite the frequent news media reports concerning environmental toxins, millions of Americans imbibe excessive amounts of alcoholic beverages, and this is usually coupled with smoking. The neurologic effects of alcohol include acute intoxication, delirium tremens, acute alcoholic hallucinosis, the Wernicke-Korsakoff syndrome, dementia, central pontine myelinolysis, hepatic encaphalopathy, cerebellar atrophy, seizures, Marchiafava-Bignami disease, tobacco-alcohol amblyopia, myelopathy, polyneuropathy, myopathy, and the fetal alcohol syndrome. Physicians may recognize these effects when they appear in their fully developed forms, but early diagnosis is much more difficult, and recognition during the preclinical phase presents a major challenge. Yet the aims should be to establish the effect of a toxin when it has only caused minor changes in function or early structural change in the nervous system, before enough damage has been done to produce overt symptomatology, and to prevent degrees of exposure that result in even occult effects.

Wernicke-Korsakoff syndrome

Wernicke in his 1881 textbook[1] described a confusional state of sudden onset accompanied by ataxia, ophthalmoplegia, and clouding of consciousness, as well as punctate hemorrhages in the gray matter around the third and fourth ventricles.

Korsakoff in 1887[2] reported the amnestic syndrome, which is characterized by confabulation due to impaired memory for recent events. He related it to cortical pathology. As early as 1928, Creutzfeld[3] stressed that there were pathologic changes in both the midbrain and the cortex, but this was not generally accepted. Victor et al in 1971[2] concluded that patients with Wernicke's encephalopathy and those with Korsakoff psychosis exhibited the same pathologic changes in both midbrain and cortex. The difference was temporal; Wernicke's was considered to be an acute process and Korsakoff's a chronic disorder. They found that 155 of 186 alcoholics who survived the acute phase later developed the amnestic syndrome.

Cerebral disorder characteristics

Lishman[3] recently reviewed cerebral disorder in alcoholism with emphasis on data that support the occurrence of subclinical forms of the Wernicke-Korsakoff disorder. Characteristic pathologic changes have been observed in alcoholics who lacked the classic clinical signs (Craviato et al[4] and Harper.[5] Victor found that only 25% of Korsakoff patients responded fully to thiamine treatment, whereas prisoners of war with the Korsakoff syndrome due to nutritional deprivation had excellent response to thiamine.[6] Lishman suggests that the alcoholics described by Victor had suffered repeated attacks of subclinical encephalopathy over a period of years causing permanent structural pathology, whereas the prisoners had been subject to only one episode. Many alcoholics develop Korsakoff psychosis without first having features of Wernicke encephalopathy. An all-or-none response to thiamine deficiency would be unlikely. Lishman reviewed the previous evidence from pneumoencephalography and CT scanning that cerebral atrophy occurs in alcoholics and presented CT scan results in 100 male alcoholics together with 50 controls. Subjects with features of Korsakoff psychosis or known brain damage were

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Presented at the Annual CME Assembly meeting of the Medical Society of the State of New York in Niagara Falls, New York section on Neurology on Sunday, June 28, 1981.

excluded. Significant differences ($p <.001$) were found in widening of sulci and Sylvian fissures and change in the ventricle/brain ratio. These differences occurred in alcoholics below 40 years of age as well as in older subjects. He has made a good case for the existence of subclinical forms of the Wernicke-Korsakoff syndrome in alcoholics, with significant cerebral atrophy even before 40 years of age. He comments that an inborn error in transketolase may be necessary for thiamine deficiency to cause the syndrome.[7] If so, then alcoholics with this deficiency might be identified and treated with thiamine even in the absence of clinical signs.

Definition

The WHO definition of alcoholism requires overt effects: "Alcoholics are those excessive drinkers whose dependence upon alcohol has attained such a degree that they show a noticeable mental disturbance or an interference with bodily and mental health, their interpersonal relations and their smooth economic and social functioning; or who show the prodromal signs of such development. They therefore need treatment." Perhaps the subclinical cases with CT scan evidence of atrophy can be regarded as having "prodromal signs." Utilizing this more liberal definition, the incidence of alcoholism is not known. Sim in 1975 gave the frequency as 4,390 per 1,000,000 population in the United States, which means almost 10 million people plus the unknown number with subclinical effects. The latter group may be very large and its members confident in the belief that their alcohol intake has caused no adverse effects. Elimination or reduction of alcohol intake at this preclinical stage would have immense value for the individuals concerned as well as for society in general. The economic cost of alcohol abuse in this country in 1975 was calculated to be almost $43 billion,[8] and in 1973 the National Commission on Marihuana and Drug Abuse noted: "Alcohol dependence is without question the most serious drug problem today"[9]; this primacy persists.

Cerebral atrophy, as an occult effect of alcohol, may result in decreased inhibition and favor continued alcohol dependency with eventual obvious clinical deficits. Early recognition, aided by psychologic testing,[10,11] provides the potential for treatment and possibly some improvement in the CT scan.[3]

Fetal alcohol syndrome

The term "fetal alcohol syndrome" was coined by Jones et al, who described it in 1973[12] and referred to a long history of reports indicating adverse effects on the fetus from maternal intake of alcohol during pregnancy. Further reports have delineated the syndrome,[13,14] animal experiments have confirmed the concept,[15] and the New York State Fetal Alcohol Syndrome Task Force has been organized to advise that women should abstain from alcohol during pregnancy and to educate the public so that it should be "common knowledge that drinking during pregnancy can harm the fetus."[16]

In 245 reported cases,[13] the main features included impaired growth, with reduced body weight and length; central nervous system effects, with mental retardation and microcephaly in more than 80% and incoordination, hypotonia, and hyperactivity in greater than 50%; a cluster of facial abnormalities, including short palpebral fissures, epicanthic folds, maxillary hypoplasia, retarded mandibular growth, and nasal changes; and malformations, including cardiac, urogenital, and skeletal defects.

Some epidemiologic data are available. Ouellette et al[17] studied 633 pregnant women at the Boston City Hospital who were classified into three groups depending on their reported alcohol consumption during pregnancy. Those classified as heavy drinkers averaged an intake of more than 1.5 oz of absolute alcohol (equivalent) daily and comprised 9% of the study group. Fifty-two percent consumed less than one drink per month, and 39% reported more than one drink per month but less than 1.5 oz of absolute alcohol daily. Infants born to the heavy drinkers had twice the risk of abnormality as those in the other two groups, which were control groups. Infants of the heavy drinkers had significantly increased frequency of jitteriness, were small for gestational age, and exhibited microcephaly and birth weight and length and congenital anomalies. This study demonstrated the increased frequency of adverse effect after high exposure to alcohol during pregnancy, but it did not provide data on the threshold exposure required for minimal effect. Although the heavy drinkers were defined as reporting an average daily consumption equivalent to 1.5 oz of absolute alcohol, they actually reported a much higher average intake. More moderate alcohol consumption might be expected to cause some but not all features of the fetal alcohol syndrome. This has been reported from the University of Washington Study[18] in which maternal intake of 1 to 2 oz of absolute alcohol daily resulted in some cases of the parietal fetal syndrome with no apparent adverse effects on the mothers.

It is not known whether the human fetus is at particular risk during a specific part of the gestational period. Many pregnancies are unplanned and, consequently, are not recognized until one or more periods have been missed. Thus for women of childbearing age who habitually consume alcohol there may be risk during the first trimester even if alcohol is discontinued as soon as pregnancy is recognized. The obvious advice must be that females of childbearing age (including teenagers) should be particularly cautious in their alcohol consumption, and they should avoid alcohol when pregnancy is known or suspected. This may be resented by some as a further application of a "double standard" and would certainly conflict with the life-style of many.

The fetal alcohol syndrome has never been reported in children of mothers who abstain from alcohol. The no-effect dose has not been determined.

All the adverse neurologic effects of alcohol listed in the opening paragraph are preceded by occult physiologic and structural changes in the nervous system, but the potential for subclinical brain damage in men and women and the particular susceptibility of the fetus are in a special category because these important hazards are not widely appreciated.

The etiology of alcohol abuse is complex and not fully understood. Initially, alcohol is a stimulant, but with higher blood levels it becomes a depressant of the central nervous system. This is perceived by many abusers as a means to relief of anxiety and stress-related symptoms. Tolerance is acquired from repeated exposure so that increased doses must be ingested to effect the required response. More susceptible individuals may have enzymatic deficiencies[7] or contributing genetic factors.[19,20] When social, economic, and cultural factors elevate the alcohol consumption of a society, an increase occurs in the incidence of alcohol abusers.[21] A decrease may be produced by education, just as smoking habits have been modified by education and warning labels, but the frequency of alcoholism in physicians[22] indicates that knowledge is not necessarily a safeguard against abuse.

Summary

Alcohol can cause adverse effects at all levels of the nervous system, and it crosses the placenta. Occult brain damage occurs before clinical effects are apparent, as demonstrated by abnormal head CT scans in neurologically intact individuals. The fetal alcohol syndrome can occur in the absence of maternal signs of alcoholism and in a partial form, which, in isolated cases, is difficult to identify and relate to alcohol.

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Psychologic Aspects of Multiple Sclerosis

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Multiple sclerosis is the most common demyelinating disease of the central nervous system, occurring in the New York State region with a prevalence ranging from 38 to 61 per 100,000.[1] It most frequently strikes adults between the ages of 20 and 40, a time of major developmental life changes. Since no curative therapy is yet known, all treatment interventions are directed at complications and secondary manifestations of the underlying disease. An area of major complications that must be managed by primary physician or neurologist is the psychologic consequences of this unpredictable and often debilitating disease.

This communication describes what we consider

Presented at the annual CME Assembly meeting of the Medical Society of the State of New York in Niagara Falls, New York Section on Neurology on Sunday, June 28, 1981.

to be characteristic psychologic features of the disease. Based upon our experience in the Rochester Area Multiple Sclerosis Clinic, we contend that there is a characteristic set of emotional and intellectual impairments in multiple sclerosis that occur as clinical manifestations of the disease itself and not as psychologic reactions to it. These syndromes need to be recognized by the responsible physician and to be taken into consideration when planning overall management.

Emotional syndromes

There is historical precedent for considering certain syndromes of emotional disorder to be characteristic of multiple sclerosis (MS). Charcot appreciated that with regard to mood, patients with disseminated sclerosis were different from other neurologic patients: "It is not rare to see them give way to foolish laughter for no cause, and sometimes, on the contrary, melt into tears without reason. Nor is it rare, amid this state of mental depression, to find psychic disorders arise which assume one or other of the classic forms of mental alienation." [2]

Cottrell and Wilson[3] coined the term "euphoria sclerotica" to describe the inappropriate sense of well-being and optimism they felt to be nearly universal among patients with the disease. Indeed, they considered the cardinal diagnostic features of the disease to be affective: mood change, alterations of bodily feeling, and changeability of emotional expression. More recently, Whitlock[4] has demonstrated increased depressive symptomatology in an MS group compared with a group of disability-matched neurologic controls. Episodes of paranoid psychosis[5] and mania[6] have been reported during exacerbations of MS, but they seem to be uncommon.

In the Rochester Area Multiple Sclerosis Clinic, we care for approximately 200 patients with definite or probable MS. There are four emotional syndromes among this clinic population which we confront with such regularity that we have come to consider them characteristic signs of the disease.

Fatigue. The first of these affective syndromes is fatigue. We included fatigue among these affective syndromes, not because we felt it to be in any sense "functional" or psychologically determined, but because it is a feeling that MS patients commonly report. Nearly 100% of the patients with definite MS report increased fatigability and an associated need for rest. Since fatigue, as all feelings, is invisible, it is easily misinterpreted by family, friends, and work associates as laziness. The interpretation of this symptom as neurologically determined for the patient and his family has become part of our standard working procedure in the clinic.

Subtypes of fatigue. In fact, there are several subtypes of fatigue within this population. Multiple sclerosis patients are subject to the normal fatigue associated with activities of everyday life. In addition, they experience a muscle-strain fatigue, related to weakened muscles. If one arm is weakened, the other must work harder. Walking with a cane places increased demands upon the "good" leg and the shoulder girdle muscles. These types of fatigue can be classified as activity related. Depression may also be described initially as fatigue, but this tends not to be actively related.

Fiber fatigue. A third type of fatigue, which we have termed "nerve-fiber fatigue," is unique to MS. Demyelinated and remyelinated nerve fibers conduct impulses slowly and fail entirely to conduct impulses under certain circumstances. An elevation of body temperature as little as 0.5°C may produce conduction blockade in marginally functioning fibers,[7] resulting in a real increase in neurologic symptoms, such as weakness, numbness, incoordination, and muscle fatigue. This fatigue, unlike the activity-related fatigue described earlier, cannot be overcome by increased effort, since even the normal slight variation of body temperature can produce nerve-fiber fatigue. Body temperature is usually at its peak in the late afternoon, and this is the time during which MS patients describe themselves as at their weakest.

Fatigue is quite distressing to the MS patient, not only because of the physical disability caused by it, but also because the condition is often not regarded as "real."

Case report

A 26-year-old woman had classic relapsing-remitting multiple sclerosis for three years. She experienced frequent attacks involving optic nerves, oculomotor pathways, and pyramidal tracts. Despite frequent attacks, recovery was substantial and she had no obvious persisting physical deficits. She had no cognitive or memory impairment and no affective disturbance. However, she experienced overwhelming fatigue beginning in early afternoon and after only moderate exertion. Without a rest period she remained incapacitated for the rest of the day, unable to prepare dinner and retiring to bed in the early evening. She worked as a secretary and was embarrassed by the fatigue and associated need for rest. Her employer, husband, and doctor implied to her their opinion that she was lazy. This attitude angered and frustrated her, adding significantly to her distress.

This woman's complaints of fatigue are typical. The aggravating skepticism in her work and home environments was unnecessary. The physician caring for this type of patient must be aware of the problem and must reassure the patient of the validity of the symptom and the associated disability. In addition, the patient may need help in scheduling short rest periods prior to occasions of increased activity and in organizing both home and workplace so as to minimize activity requirements. Vocational rehabilitation may be helpful in this regard.

Lability. In our clinic, approximately three patients out of 10 manifest the syndrome of emotional lability. By the term "emotional lability" we refer to sudden shifts of affective expression that are of short duration and are dystonic with underlying emotional states. A person with this syndrome might suddenly laugh or cry in response to such minor stimuli as a question about the weather or a change in position. When the stimulus is an internal, emotional state, the externally visible affective response may be inappropriate, such as laughing when the emotion is sad or vice versa. When advanced, this syndrome can be socially disabling. Patients are often embarrassed by the inability to control affective responses. Emotional "incontinence" is frequently more disturbing to the patient than physical incontinence.

Early in the course of this condition, such people may be mislabeled as to their underlying mood states. One common error is the labeling of someone as depressed when frequent weeping is observed without ascertaining the presence or absence of a sustained, underlying dysphoria. Another similar oversight is the failure to identify depression in the patient whose lability produces frequent smiling or laughter.

Questions we ask to identify this syndrome include the following: Do you find yourself suddenly weeping, when you don't feel sad, or laughing when nothing is really that funny? Do you laugh or cry when you watch television? Can you hide your feelings from others when you want to?

Euphoria. In our population, there is an additional independent syndrome of euphoria. By euphoria we mean a feeling of well-being that is inappropriate to the reality of the situation and persists through time as more than merely mood fluctuation. There is a quality of anosognosia, or indifference to disability, in this state, and we do not see it without evidence of other, diffuse cerebral involvement. It is not a common syndrome.

Case report

A 48-year-old woman was seen in the MS clinic for follow-up of definite multiple sclerosis with a 15-year relapsing course. Her symptoms had included at various times tingling paresthesia, urinary incontinence and urgency, ataxia of all limbs, spastic paraparesis, and photophobia. On mental-status examination, she described prominent fatigue symptoms, limiting her activities especially later in the day. She demonstrated some cognitive deficits of a mild degree with regard to verbal learning, short-term verbal memory, and short-term visual memory. On examination of mood, she emphatically minimized the significance of her considerable disability, stating "I'm the luckiest person in the world . . . I don't consider myself to have an illness; only something to live with." (This statement came at the time of an acute exacerbation of paraparesis.) Her husband and adult children echoed these feelings, stating that they felt her problems to be minimal and repeating the theme, "It's so wonderful that she is so cheerful through all of this; we think she is so strong." Neither depression nor emotional lability was present.

This woman exemplifies an important feature of the euphoric state in multiple sclerosis; it is often adaptive within the family system and is rarely a cause for complaint by either patient or family. It seems that, at least in our community, inappropriate cheerfulness is socially more desirable than appropriate glumness. We avoid identifying this mood state as a problem in our work with these patients, and we do not attempt to treat it unless it masks an underlying depression that is too near the surface to be ignored.

Depression. "Suffering from depression . . . the melancholy fit fell very suddenly, all the color went out of my life and the world was dirty gray." [8] Dr. Barbellion used these words in 1919 to describe the true depression that accompanies MS. There is evidence that major depressive episodes occur more frequently in patients with multiple sclerosis than in a neurologically impaired control group, matched for disability.[4] At one time, it was considered that strong affective experiences could precipitate clinical MS,[9] but this point of view has not found favor among clinicians. It is true, however, that the first clinical symptom of MS may be a depressive episode.[10] It also seems likely that depressive episodes become longer and of greater severity as neurologic disability increases.[11]

A network of psychologic services is required in the MS clinic to deal with the spectrum of depressive illness that is encountered. Major depressive episodes, with sustained dysphoria, anergy, and biologic signs, are easily identified and referred to associated psychiatric services. These episodes tend to be associated with exacerbations of the demyelinating illness, either preceding or accompanying them.

Case report

A 31-year-old licensed practical nurse received the diagnosis of MS after two years of fluctuating paresthesia, gait ataxia, and urinary symptoms. She was admitted and given a course of ACTH, which resulted in some improvement. After discharge, she decided upon a self-imposed deadline of March 1 for her return to work. In late February, she experienced an exacerbation, with an increase of leg weakness and ataxia. She developed a sleep disturbance and feelings that she had "no energy, and no interest in doing anything." She felt that she was a failure and that she would never be productive again. She considered suicide but was restrained by her religious faith.

Less spectacular, but more chronic depressive illness is nearly universal in our clinic population. These are the dysthymic disorders—chronic mood disturbances associated with neurologic, social, and occupational losses as the disease progresses. Secondary impotence becomes common when autonomic pathways are interrupted by the disease, requiring major readjustments in sexual patterns and marital roles. Marital conflicts and intergenerational family conflicts are often triggered by neurologic deterioration in a previously healthy adult.

Feelings of depression are not the same as feelings of nerve-fiber fatigue, and although the two may coexist, we are struck by how frequently they are confused, especially early in the course of MS. The following patient experienced fatigue rather than depression, but made major life-style changes on the mistaken belief that she was experiencing melancholia.

Case report

A 48-year-old woman who came to our clinic described a three-year history of intermittently progressive ataxic paraparesis, with tingling dypesthesias of the arms. During the second year of the symptoms, just prior to diagnosis, she formulated her difficulty as a "heavy, leaden feeling throughout my body, pulling me down after any activity." Her job performance deteriorated, and her interpersonal relationships became strained. She decided that she was suffering from a "terrible depression," although she had no prior experience with a significant affective disturbance. She quit her job and went to Trinidad for several months for a rest cure. The feelings continued, and upon her return, she consulted a physician for further treatment, at which time a diagnostic admission was arranged.

Cognitive dysfunction

There is no doubt that a significant number of patients with MS experience cognitive impairment as a result of disease progression. Utilizing standard military intelligence tests, Canter[12] showed in 1951 that a large group of MS patients deteriorated over time. Numerous neuropsychologic studies since then[13–17] have confirmed a pattern of cognitive deficits in patients with MS, which includes impairment of nonverbal abstraction, of immediate and delayed recall, and of verbal learning ability, with a relatively intact verbal IQ. These cognitive impairments are not necessarily correlated with degree of neurologic impairment, nor are they obvious during a cursory interview. Peyser[18] has shown that of MS patients with cognitive impairment, 50% are not detected on standard neurologic investigation. This particular pattern of cognitive impairment, with relatively greater disruption of memory and learning processes than of cortical language function, would be classified as an early form of subcortical dementia in the classification proposed by McHugh and Folstein.[19]

Approximately half of the patients we see in our MS clinic prove to have cognitive impairment on careful testing. They are unable to self-identify when asked, "Has this disease interfered with the way you think?" Clues concerning cognitive decrements may be evident from the clinical history.

Case report

A 42-year-old woman was followed in clinic with an eight-year history of episodic diplopia, tingling paresthesias, and spastic paraparesis. She had graduated from college at the age of 38, but was working as a domestic assistant instead of in a job appropriate to her education. She felt that her thinking was normal, but on more careful testing, proved unable to learn a list of 10 words, despite multiple trials; immediate and delayed visual recall was also impaired, and she made errors on simple calculations.

The pattern of impairment noted in this woman tends to be the early impairment pattern seen in our clinic: mild difficulty with verbal recall, with visual memory, and with spontaneous generation of categories of words. In most situations, this does not seriously interfere with continued productive work, but in some instances, adjustments in responsibilities may be necessary.

Treatment

We believe that treatment of the psychologic syndromes that are part of MS makes a major contribution toward improving the quality of life of these patients. None of the treatments are short term, and most rely upon the therapeutic relationship between the patient and the clinic or physician. For the fatigue of multiple sclerosis, our approach is primarily educational and behavioral. We provide the patient and his or her family a simple explanation concerning the sources and characteristics of fatigue in MS, emphasizing that it is in no way willful and that it does not represent laziness. We recommend a modification of activity schedules so that activity peaks are in the morning, when body temperature tends to be low, and rest or nap periods are in the afternoon, when temperatures are higher, or in some cases, before planned activities. Often this requires a reallocation of household responsibilities, such as preparation of meals, and some families need assistance with this. On occasion, employers need to be informed of the medical reasoning behind such changes in schedules.

Emotional lability responds to low-dose tricyclic antidepressant medications, such as amitriptyline, 75 mg per day. We hypothesize that mood instability unresponsive to tricyclics may be responsive to $LiCO_3$, but we have not yet had occasion to give this a trial.

The euphoria, in general, does not require treatment. The patient and family usually interpret this as a sign of psychologic strength in the face of adversity, and we reinforce this perception. If such an interpretation has not already been made, we might offer it as a suggestion.

Depression is our most difficult treatment issue. We use a variety of tricyclic antidepressants and attempt to obtain benefit from their anticholinergic side effects as well. If a patient has autonomic dysfunction with spontaneous bladder contractions and urinary incontinence as well as depression, we might recommend a tricyclic with high anticholinergic properties, such as amitriptyline. If a patient has relatively greater difficulty with anergy and fatigue, we might recommend a more activating tricyclic, such as protriptyline. When there is an agitated or anxious quality to the depression, we will add an antianxiety agent, such as diazepam. This agent provides additional benefit for spasticity and flexor spasms, and we consider it more actively in patients with these features.

Emotional supports, however, are the mainstay of the clinic's approach to depression. The core dynamic experience of this disease for patient and family is loss, and we attempt to help them in their adjustment to it. Ongoing support groups are seen by clinic mental health professionals, and here newly diagnosed patients have an opportunity to learn from others with the disease. Individual psychotherapy is available for those who are experiencing particular difficulties or who have preexisting mental and personality disorders. For those unable to function in active jobs, vocational counseling and retraining are arranged. For those unable to work at all, craft and hobby groups are provided at the clinic. For those unable to drive, transportation to the clinic is provided. A particularly difficult loss is that of orgasmic sexual functioning, and counseling directed at assisting couples to find compensatory ways of relating to each other is provided. Underlying all of this, we hope, is a developing therapeutic relationship between the patient and the clinic, which is stronger than any personal relationship with a particular physician or staff member.

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The Etiology, Diagnosis, and Treatment of Bladder Trauma

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In reviewing the history of treatment of bladder trauma, the definitive treatment did not evolve until the early 1900s, when Evans and Fowler presented a paper stating operative interference could reduce the mortality of intraperitoneal rupture of the bladder.[1] Until that time, most people felt that Hippocrates was correct in stating that bladder wounds prove invariably fatal. However, it was not until after World War I that routine use of suprapubic cystostomy tube drainage became accepted.

Due to its location deep in the bony pelvis and behind the symphysis pubis, the bladder is well protected. However, several variables are important. In the female, the cervix and uterus are posterior to the bladder, while in the male the seminal vesicles and rectum are posterior. Age is also important, and the bladder of an infant and child is an abdominal organ and attains its position in the pelvis usually after age 20. Its shape also depends on the urinary volume it contains, and the type of injury that may occur frequently depends on the volume of retained urine.

Presented at the combined Section on Anesthesiology, Surgery, and Urology; Symposium on Trauma Surgery, Saturday, June 27, 1981.

Injuries to the bladder can be secondary to penetrating or blunt trauma. The most common causes of penetrating injury are gunshot wounds, stab wounds, and iatrogenic injury. Iatrogenic injury is secondary to attempted catheterization, urologic instrumentation, or surgery. Bladder injuries secondary to blunt trauma may be classified as follows: (1) contusion, (2) intraperitoneal rupture, (3) extraperitoneal rupture, and (4) combined intraperitoneal and extraperitoneal rupture.

Diagnosis

In a review of 1,798 cases of fractured pelvis by Prather and Kaiser, 10% of the patients had associated rupture of the bladder and in 82% the rupture was extraperitoneal.[2] In a paper coauthored by Pontes that was a review of 100 cases of fractured pelvis, 10 patients had urologic injuries, and both authors stressed the correlation of injuries to the pubic symphysis with extraperitoneal rupture of the bladder.[3] Almost all of these injuries occur on the anterolateral wall of the bladder close to the bladder neck, and urine extravasates into the space of Retzuis. It can then follow fascial planes in the pelvis and reach the perinephric area or pass through the obturator foramen to the thigh and the inguinal canal to the scrotum. It can also extend upward in the abdominal wall to the umbilicus.

Diagnosis

The diagnosis of ruptured bladder is generally not difficult if the likelihood of injury is suspected. Hematuria, dysuria, suprapubic or lower abdominal pain, and shock are the most common associated signs and symptoms. When shock is present, other causes of hypotension should be meticulously investigated. After initial evaluation by history and physical exam, the radiologic evaluation of the urinary tract proceeds as follows: (1) plain film of abdomen (presence of foreign body or skeletal fracture), (2) retrograde urethrogram (continuity of the urethra), (3) cystogram (A-P film, paying particular attention to the size and shape of the bladder, as well as any trabeculation irregularity or vesicoureteral reflux), and (4) intravenous pyelogram (bolus and drip infusion).

Despite the leakage of urine into the peritoneal cavity, signs of peritoneal irritation may be minimal or absent. However, with intraperitoneal rupture, elevation of blood urea nitrogen can occur out of proportion to creatinine. This does not occur with extraperitoneal bladder rupture.[4] Patients with a ruptured bladder may have no desire to void and may be unable to do so, since the contents of the bladder have been emptied. Therefore, a high index of suspicion along with a readiness to do lab and x-ray studies is necessary.

In the presence of a pelvic hematoma, the bladder takes on a teardrop deformity. In patients with extraperitoneal rupture, flamelike wisps of urinary extravasation are noted. Next, an oblique study and postevacuation films are obtained to preclude missing a small perforation that could be obscured in the A-P film by contrast in the bladder. Also, Reiser et al reported on four of 29 cases in which the cystogram was normal even though rupture existed. These were all from bullet wounds. He also collected 11 other cases from the literature in which this occurred. He recommends using a volume of 250 mL of contrast; if no extravasation is demonstrated, an additional 150 mL of contrast is injected.[5]

Review

For this presentation, we reviewed all the bladder injuries that occurred at Nassau County Medical Center between 1970 and 1980. This included 57 cases, of which 27 were bladder contusions and 30 were bladder rupture.

Table I lists the bladder contusions and associated injuries. A contusion is a nonperforating injury in which damage to the bladder wall has occurred. The patients with gross hematuria were treated with Foley catheter drainage and bed rest, while the patients with microscopic hematuria were treated with bed rest alone until the urine cleared. There were no complications in this group.

The following figures reveal the etiology of the ruptured bladders between 1970 and 1980. A total of 30 cases were found (Table II). The iatrogenic causes included one case each secondary to bladder tumor resection, bladder wall biopsy, and release of adhesions between bladder and uterus.

The spontaneous rupture was secondary to infiltrating carcinoma of the cervix. In a paper by Waterhouse on trauma, which reports on 38 injuries to the bladder including five contusions, blunt trauma was also the etiology in approximately 80% of the cases.[6] So in these two studies this figure has held fairly constant.

The different sites of bladder rupture were extra-

Table I. Bladder Contusion and Associated Injuries

Etiology	No. of Patients
Motor vehicle accident	25
Bicycle	2
Symptoms	
Gross hematuria	12
Microhematuria	15
Associated injuries	
Abdominal	13
Pelvis	10
Leg	2
None	2
Treatment	
Gross hematuria—Foley catheter + bed rest	
Microhematuria—bed rest	
Complications	
None	

Table II. Bladder Rupture Etiology

Type of Injury	No. of Patients
Penetrating wounds	
Gunshot	3
Iatrogenic	3
Blunt trauma	
Motor vehicle accident	20
Blow to abdomen	2
Spontaneous	1
Fall	1
Total	30

peritoneal (16 cases), intraperitoneal (8 cases), and combined (6 cases). At the time of admission, 80% of the patients experienced lower abdominal pain and 80% had macroscopic hematuria. An associated pelvic fracture was noted in 66% of our patients. Additional associated injuries included 10 patients with a ruptured spleen, 8 patients with large- or small-bowel perforations, and 3 patients with pneumothorax or hemothorax.

The average hospital stay for a ruptured bladder uncomplicated by associated injury was 12 days. The majority of our patients because of intraabdominal to skeletal injuries remained in the hospital an average of five to six weeks.

There were four surgical deaths, all of which were complications of associated multiple trauma. Four patients developed wound infections; all of these had a perforated viscus at the time of exploration.

Treatment

In 29 of the 30 cases, exploratory laparotomy was performed. The treatment of choice was repair of any intraabdominal injury, followed by primary bladder repair and insertion of a suprapubic cystostomy tube. The one patient who was not treated in this manner had an extraperitoneal bladder perforation, secondary to a bladder wall biopsy. In this case, treatment consisted of Foley catheter drainage.

Perivesical drains were left in place an average of seven to 10 days. The suprapubic catheter was utilized approximately seven to 14 days, depending on the extent of injury. Before removal of the catheter, all patients underwent cystograms to determine the integrity of the bladder.

The principles in the management of the patient with a ruptured bladder are (1) adequate urinary diversion from the area of injury, (2) prompt and adequate drainage of the perivesical area and of other areas of extravasation, and (3) closure of the defect in the vesical wall.

In the patient with a penetrating injury, exploration should always be promptly performed in order to assess the integrity of the surrounding abdominal viscera and vasculature. Following abdominal evaluation, the bladder is opened and explored. The integrity of the lower ureter and ureteral orifices is noted. The use of the indigo carmine may help facilitate the identification of the ureteral orifices.

If the penetrating missile has violated the peritoneal surface of the bladder, the peritoneum is freed and the bladder defect closed in two layers. A suprapubic cystostomy tube (No. 28 or No. 30 F Malecot type) is inserted with Penrose drainage on either side of the bladder neck. Patients with intraperitoneal rupture following blunt trauma are managed similarly.

Recently, Richardson and Leadbetter, in an article published in the *Journal of Urology*,[7] advocated nonoperative treatment of the ruptured bladder. If this method of therapy is elected a number of points must be kept in mind:

1. The patient must have proved bladder rupture and not be a candidate for surgical exploration because of some other complicating injury.
2. Diagnosis must be made early (in less than 12 hours).
3. There should be no history of active urinary infection or complicating genitourinary disease. Broad-spectrum antibiotics should be used for two weeks.
4. A large-bore Foley catheter (24 F minimum) should be easily inserted.
5. All patients should be hospitalized for observation and monitoring of vital signs and urinary drainage.
6. If for any reason the patients condition deteriorates, surgical exploration and open drainage procedure must be performed.

Only three patients were treated in this manner, two of whom experienced extraperitoneal rupture following blunt trauma, and, intraperitoneal rupture following cystogram. All patients were without complications a year following the injury.

Robards[8] et al in 1976, reported on 8 patients with bladder rupture treated conservatively with Foley catheters. However, only two patients had intraperitoneal rupture. Therefore, the total reports of conservative management of intraperitoneal rupture of the bladder are three cases with good results. Reiser reported on two patients treated conservatively who died and condemns the use of intraurethral Foley alone as the only method of therapy.[4] We agree with a more aggressive approach.

Injuries of the bladder neck or prostatic urethra

These injuries are usually a partial or complete dismemberment of the urethra just above the superior leaf of the urogenital diaphragm. The diagnosis is made by KUB and retrograde urethrocystogram.

On rectal exam, the prostate may be felt to be high riding. The treatment has always been controversial, and previously an attempt was always made to reestablish continuity of the urethra over a stent. However, presently the recommended therapy as stated by Morehouse,[9] who credits Johanson, and Mitchell[10] is use of a suprapubic cystostomy tube only at the time of injury. The retropubic space is not explored. No reapproximation of the urethra is done. Further evaluation and, if necessary, further treatment is done three weeks to three months later. No stent is used with either partial or complete ruptures.

The advantages of this method of treatment are

1. The surgery is not difficult to perform.
2. These patients often have multiple injuries, and less time is spent on the urethral injury.
3. The reported incidence of the development of impotence is less. In 1963, Chambers[11] reported a 26% incidence of development of impotence, and in 1970, Gibson[12] reported a 35% incidence of the development of impotence following immediate repairs. Morehouse reports that Johanson had a 3% incidence of the development of impotence when suprapubic cystostomy was the only immediate treatment.[9]
4. There is also a low incidence of second-stage surgery for stricture required. It was necessary in only 13 of 37 patients in Mitchell's report and in none of 11 patients in Morehouse's reports.

The assessment of impotence has many limitations but presently is more exact with the ability to measure nocturnal penile tumescence. However, because there are reports in the literature indicating that up to 20% of patients who are impotent may require up to 19 months for the return of potency, we would recommend that surgical correction be delayed for at least two years following injury.

Summary

The chances of having an associated bladder rupture in a patient with a fractured pelvis is only 10%. Patients with bladder ruptures secondary to blunt trauma will have an associated fractured pelvis greater than 66% of the time.

The authors plea for continued aggressive treatment of bladder rupture with surgical repair as early as possible, especially in cases of intraperitoneal rupture. We further recommend conservative treatment of the proximal or prostatic urethral and bladder neck rupture.

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Surgical Treatment of Eye Muscle Palsies

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The major problems patients with an eye muscle palsy have include diplopia, deviation in primary gaze, and often some limitation of gaze into the field of action of the affected muscle or muscles. Management of extraocular muscles palsies consists of first determining the etiology (eg, trauma, vascular disease, expanding lesion in the central nervous system) and then treating the basic cause when possible. The patient should be observed for signs of improvement for three to six months before any type of definitive therapy for the ocular misalignment itself is decided on. Often, patching one eye or the use of prism glasses can be helpful in alleviating symptoms temporarily. Ocular electromyography, saccadic velocity testing, and active force generation testing can be useful in following the progress of the extraocular muscle palsy and in determining whether any improvement is occurring. While the patient continues to show improvement, observation is probably indicated. When the palsy has been present for four to six months without signs of change and the patient continues to be symptomatic, further therapy is indicated.

Sixth-nerve palsy

Patients can have unilateral or bilateral involvement with a sixth-nerve palsy. A major complaint is usually horizontal diplopia, accompanied by a large-angle esotropia and limited abduction (Fig 1).

Presented at the Section Emergency Medicine Jointly Sponsored by the New York State Chapter of the American College of Emergency Physicians. Ophthalmology on Saturday, June 27, 1981.

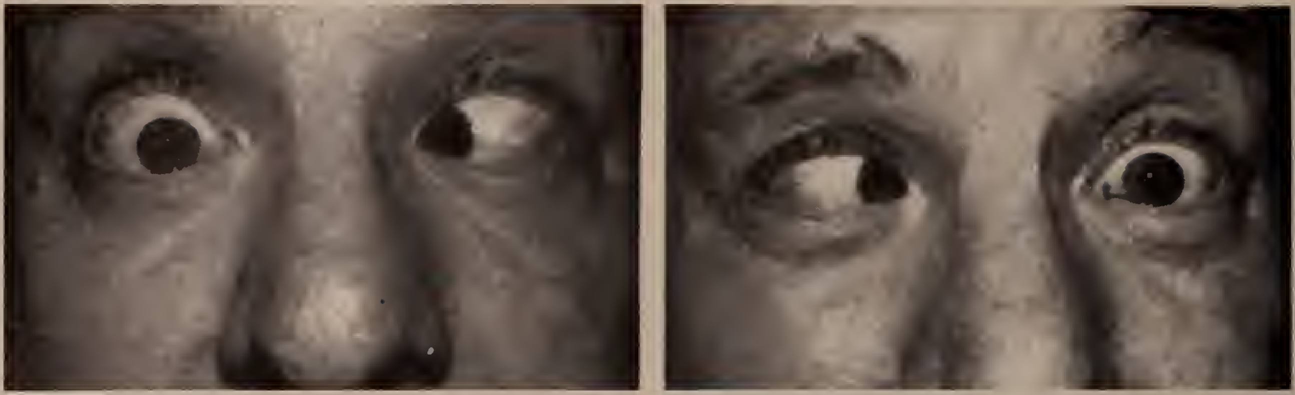

FIGURE 1. Right sixth-nerve palsy. Large right esotropia in primary gaze (left photo) with absent abduction, right eye, on attempted right gaze (right photo).

Treatment options depend on the size of the deviation and the amount of restricted eye movement. When the esotropia is relatively small (under 10 or 12 prism diopters) and the limitation of lateral gaze is not marked, base-out prisms can provide fusion in primary gaze.

In patients with more severe lateral rectus weakness, surgery will often be necessary. Patients with paresis (but not complete paralysis) of the lateral rectus muscle can be treated by recession of the antagonist (sometimes contractured) medial rectus muscle with resection of the involved lateral rectus muscle. This is often sufficient to straighten the eyes in primary gaze, alleviate the diplopia, and improve abduction significantly, although lateral gaze movements may still not be full. If the patient is a teenager or an adult, an adjustable surgical technique may be used to "fine tune" the surgical result after surgery. By being able to adjust the position of the recessed medial rectus muscle (or, if necessary, the resected lateral rectus muscle), small amounts of residual overcorrection or undercorrection can be eliminated, thereby providing an optimum result in primary gaze.

When complete paralysis of the lateral rectus muscle is present, by utilizing medial rectus recession combined with lateral rectus resection it may be possible to straighten the eyes in primary position, but no abduction will be provided. In order to achieve some degree of lateral gaze, it is necessary to perform a type of transposition surgery. One option would be to move the superior and inferior rectus insertions laterally to a point just above and below the lateral rectus insertion. This transposition procedure can result in some improvement in lateral gaze, although abduction will not be full. It also has an effect in straightening the eyes in primary gaze but does cause modest limitation of medial gaze, which is usually not a significant problem. If the lateral rectus paralysis has existed for some time, the antagonist medial rectus is often tight. For a transposition procedure to be effective, the antagonist contracture must be released, which will require a recession of the medial rectus muscle in order to allow

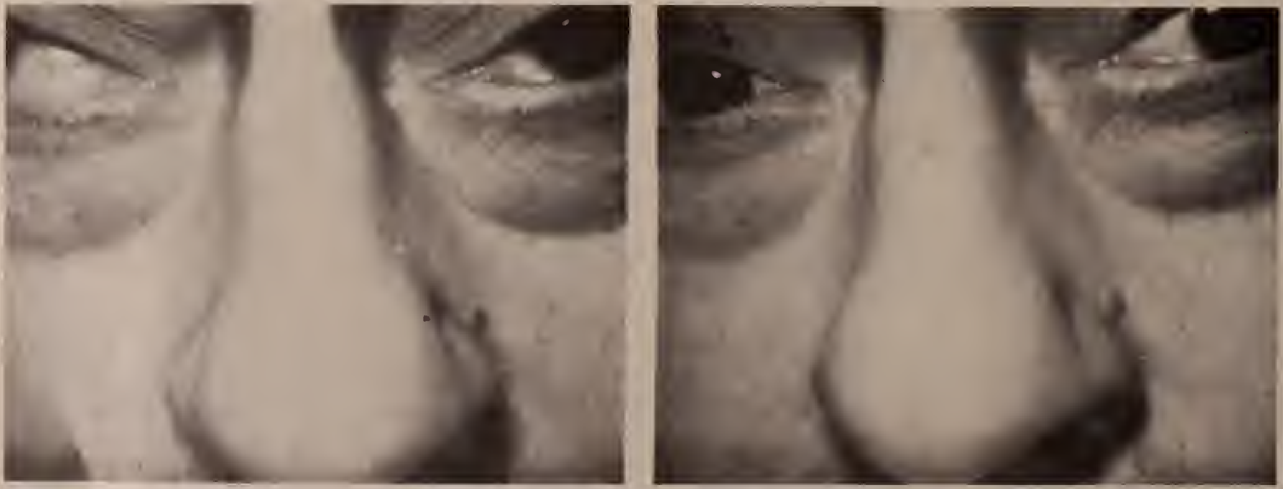

FIGURE 2. Left third-nerve palsy. Left exotropia in primary gaze (left photo). Diminished adduction, left eye, on attempted right gaze (right photo).

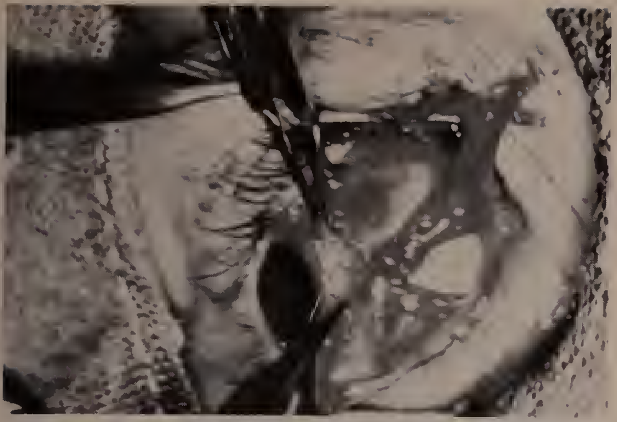

FIGURE 3. Right superior oblique tendon has been isolated, broken out of the trochlea, resected, and sutured above medial rectus insertion.

the transposed muscles to rotate the globe laterally past the midline. If surgery is done on three adjacent rectus muscles (superior rectus, medial rectus, and inferior rectus), there may be a problem with anterior segment ischemia. The surgeon may, therefore, choose to perform a Jensen procedure (splitting the superior, lateral, and inferior rectus muscles and suturing the lateral portions of the superior and inferior rectus muscles to the upper and lower portions of the split lateral rectus muscle, respectively). In the Jensen procedure, the rectus muscles are not disinserted, and circulation on the nasal half of the superior and inferior rectus muscles can be preserved to prevent ischemic problems. If full-tendon transpositions are preferred, it is probably best to wait six months following the medial rectus recession. When transposition surgery results in full abduction, it is likely that the lateral rectus was not paralytic but only partially weakened and that simple recession-resection surgery could have been successfully utilized.

Third-nerve palsy

Patients with third-nerve palsy often have a significant exotropia combined with a small hypotropia; limitation of adduction (Fig 2), elevation, and depression; and a large amount of horizontal diplopia with a fairly small vertical separation. The upper lid may be ptotic (if completely ptotic, diplopia may not be a complaint); the pupil may be dilated and range of accommodation reduced if the internal branch of the third nerve has also been affected.

A period of recovery of four to six months' duration should be allowed. When the third nerve is paretic (but not completely paralytic), it is often possible to achieve a good result with a lateral rectus recession combined with a medial rectus resection. If a small vertical deviation coexists (for example, a hypotropia), the insertions of the lateral and medial rectus muscles can be elevated to reduce or eliminate the hypotropia. The adjustable suture technique is again useful to obtain an optimum result. Small amounts of residual deviation that persist two to three months after surgery may be corrected with prism glasses.

Complete third-nerve paralysis provides one of the most difficult challenges in treating strabismus patients. The only functioning muscles are the lateral rectus and the superior oblique, both of which have abducting function; there is usually a very large amount of exotropia. In these patients, the lateral rectus must be recessed to an extremely large degree (14 to 16 mm of recession behind the insertion is not unusual). The medial rectus may be resected to a

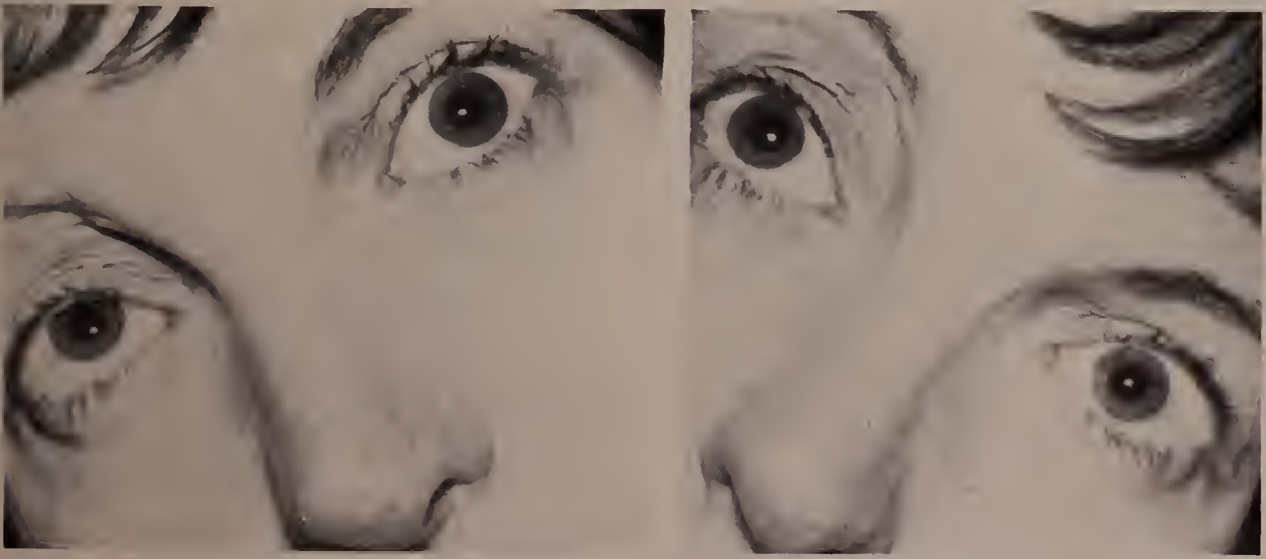

FIGURE 4. Bielschowsky head-tilt test. Right hypertropia is increased on right head tilt (right photo) and decreased on left head tilt (left photo). Diagnosis of right superior oblique palsy is likely.

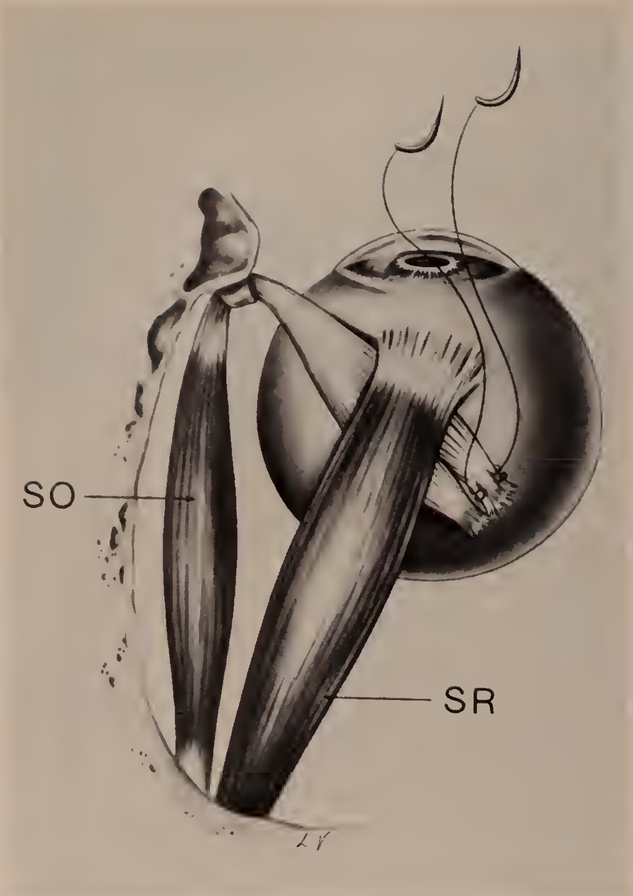

FIGURE 5. Adjustable Harada-Ito procedure. Anterior fibers of superior oblique (SO) tendon have been split and suture placed behind insertion of = superior rectus (SR) muscle.

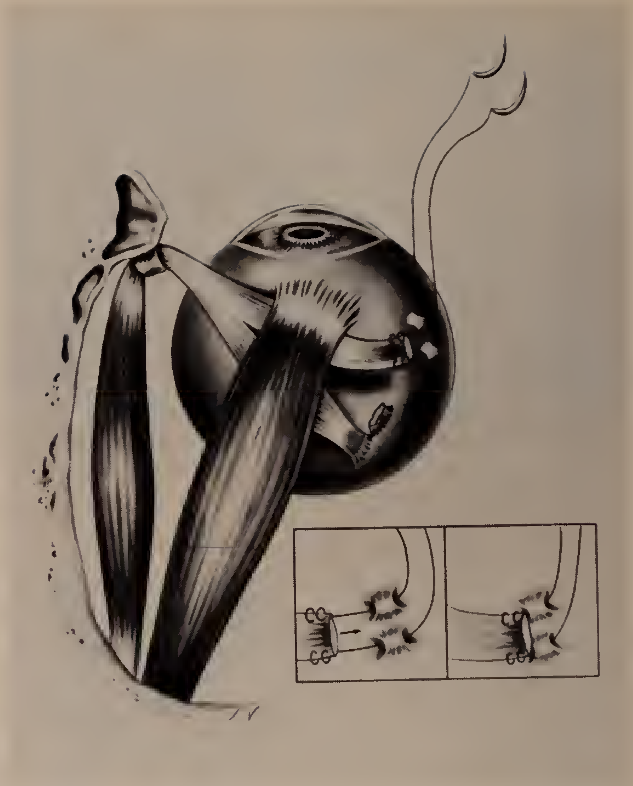

FIGURE 6. Adjustable Harada-Ito procedure. Anterior fibers of superior oblique tendon have been transposed anteriorly and laterally, using an adjustable suture technqiue (see inserts).

large degree (8 to 10 mm) along with a lateral conjunctival recession and a superior oblique tenotomy. This can result in good alignment in primary gaze but will not provide adduction.

Some surgeons have recommended superior oblique transposition to the nasal side of the globe in order to provide long-term stability and improve adduction modestly. In one procedure, the superior oblique muscle is isolated, broken free from the trochlea, resected, and attached just above the medial rectus insertion (Fig 3). A more simple and possibly as effective procedure is that of isolating the superior oblique tendon, cutting the tendon medial to the superior rectus muscle, and resecting and suturing it to the superior nasal quadrant so that the superior oblique muscle is no longer an abductor and depressor and may provide some minimal nasal rotation. Transposition surgery, utilizing the superior and inferior rectus muscles to provide adduction, is usually not possible since these muscles are also involved in the third-nerve paralysis. A good result in the patient with third-nerve paralysis would be absence of diplopia and good alignment in primary gaze with limited rotation about the primary position. Full ocular rotations are not possible in these cases and should not be thought of as a realistic goal of surgery.

Superior oblique palsy

Superior oblique palsy frequently follows even mild head trauma. The patient usually complains of vertical diplopia, and examination reveals a hypertropia on the side of the involved superior oblique muscles, excycloduction of a modest degree that increases in down gaze, and full ocular rotations, including downward in adduction (the field of the superior oblique muscle). After the palsy has been present some time, it is not unusual to find overaction of the antagonist inferior oblique muscle, and there may be some limitation of gaze down and inward, although this is not invariable. The Bielschowsky head-tilt test reveals a greater amount of hypertropia on the side of the superior oblique palsy (Fig 4). If this head-tilt test is positive to both sides (a right hypertropia on right head tilt and a left hypertropia on left head tilt), the diagnosis of bilateral superior oblique palsy must be considered. The amount of excyclotorsion in bilateral superior oblique palsy is often greater, producing more symptoms.

Occluding one eye is a useful temporary method of alleviating diplopia. If the deviation continues without improvement for four to six months, definitive therapy is indicated. For small vertical deviations, prism therapy can be of assistance. However, it is of no value in cyclotropia deviations.

If the patient chooses not to wear prisms or if the vertical deviation is too large for prism correction, surgery is indicated. With unilateral inferior oblique overaction and a vertical deviation under 15 prism diopters, an inferior oblique weakening procedure (recession or myectomy) can be successful. When the vertical deviation is larger, inferior oblique surgery can be combined with a vertical rectus recession, either a superior rectus recession on the ipsilateral side or an inferior rectus recession on the contralateral side. If the deviation is greater in gaze toward the side of the superior oblique palsy, a superior rectus recession may be preferred. If it is greater to the opposite side (as is often the case), the inferior rectus recession is chosen.

Symptomatic cyclotropia (usually greater than 5°) is often the result of a bilateral superior oblique palsy. In order to correct symptomatic excyclotropia, a strengthening procedure of the paretic superior oblique (tuck) can be performed. It may be difficult to control the effect of this procedure. Some limitations to elevation of the eye in adduction is often found postoperatively. In 1964, Harada and Ito described a procedure in which the anterior fibers of the superior oblique tendon were brought anteriorly and laterally to increase the torsional effect of the superior oblique muscle. A modification of this procedure has been devised in which the anterior fibers of the superior oblique tendon are disinserted and reinserted in an anterolateral position using an adjustable suture technique (Figs 5, 6). This provides both increased incycloduction by tightening the anterior torsional fibers of the superior oblique tendon and controlled effect of the surgery by utilizing an adjustable technique.

Conclusion

The treatment of extraocular muscle palsies has been described. For early palsies, observation is recommended. When the deviation is rather small and the weakness is only mild, prism therapy may be useful. In patients with severe or complete paralysis of one or several extraocular muscles, various surgical procedures have been described. These vary from large recession-resection operations combined with conjunctival recession to more involved muscle-transposition surgery, which improves rotation into the field of action of the paralytic muscle. The goals are the elimination of symptomatic diplopia, good alignment in the primary position, and some improvement in ocular rotation about the midline.

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Colorectal View of Venereal Disease

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In the past decade our traditional concept and understanding of venereal disease have changed drastically. Because of the burgeoning gay population, physicians are seeing increased numbers of problems related to homosexual activity. Most of the venereal diseases encountered by colorectal surgeons are in the male homosexual.

For the purpose of this report, we define venereal disease as disease transmitted during or as a result of sexual activity, including traditional heterosexual relations as well as orogenital, anogenital, and anolingual activities, and disease acquired by unusual acts involving the insertion of foreign bodies for erotic gratification and fist fornication. Many diseases previously not even recognized as such are now included among the broadened concepts of venereal diseases.

The gay bowel syndrome

In 1976, Dr. Norman Sohn et al reported on the gay bowel syndrome.[1] At the time, homosexual men were estimated to comprise 10% of the male population of New York City. Some of the conditions encountered were well-known as venereal in origin, and others are only now becoming recognized as such. Included were condyloma acuminatum, amebiasis, viral hepatitis, gonorrhea, syphilis, anorectal trauma, shigellosis, lymphogranuloma venereum, scabies, giardiasis, molluscum contagiousum, salmonellosis, and the presence of foreign bodies.

It is exceedingly important to recognize the sexual proclivity of a patient because such information can provide important clinical clues. Since homosexual males tend to have multiple sexual contacts and to engage in both orogenital and mechanical rectal sex, more than one disease may be present simultaneously in the same patient. The recognized promiscuity of the male homosexual can lead to rapid spread of diseases throughout the community. Therefore, a detailed sexual history is important. The gay patient who comes to a physician is most often well aware of the possible venereal etiology of his disease and is generally not adverse to discussing his sexual proclivity. It is often the physician who is most embarrassed by such a discussion. The

Presented at the Section of Gastroenterology, Colon and Rectal Surgery and Radiology. 80s Update—Venereal Disease, on Friday, June 26, 1981.

physician should try to overcome this reluctance since this kind of discussion is becoming increasingly necessary.

Aside from the history, there are various ways of actually identifying the male patient as homosexual. The stereotypical occupations of these patients do not necessarily apply in a heterogeneous society. For example, among the 260 patients discussed in "The Gay Bowel Syndrome," there were 56 business executives, 42 students, 8 bankers, 8 physicians, 4 clergymen, and 7 hairstylists, as well as various other occupations. The mode of dress is also often not a clue to the sexual preference of the patient. Most of these patients were from 17 to 40 years of age, although older and younger patients have been treated. The majority of patients seen will be between 21 and 30. In the past, multiple diseases due to specific enteric infections, gonorrhea, and hepatitis were often found. Although these diseases are not unique to the gay population, they do occur in this group with unusual frequency. The physician can be alerted to the gay bowel syndrome by the existence of anal condylomata. Although these lesions are also seen in heterosexual patients who have not had rectal sexual activity, this is uncommon. Another physical sign which may be present is that of the "0" sign. The physician will note that the "anal sphincter is lax." In fact, this is not accurate. The gay male seems to have conscious control over the relaxation of the sphincter muscle and voluntarily relaxes it in order to facilitate the physician's examination. It is interesting that incontinence is extremely rare in the gay population.

Proctitis and colitis. Proctitis and colitis in the homosexual male must be differentiated from nonspecific proctitis and colitis, such as in Crohn's disease, chronic ulcerative colitis, and ulcerative proctitis. Various mechanical and infectious agents are responsible for proctitis and proctocolitis in the gay population. Probably the most common one noted is proctitis due to gonorrhea. Often the patient may not recognize that he has been in contact with gonorrhea in the immediate past. It is probably true that there is a dormant phase in the infection which may last up to several months. As with other venereal diseases in a very promiscuous population where several contacts in a single day are common, the patient may be unaware that one or more of his partners had venereal disease.

In the evaluation of patients with gonorrheal proctitis, one of the characteristic features is that the proctitis is extremely painful. This is virtually pathognomonic of gonorrheal proctitis, as other forms of proctitis are not associated with pain. Also, when the mucosa is examined — usually with a stricture scope, since this is all that the patient can tolerate — an extremely florid proctitis will be present. This may go quite high in the rectum, although it is more often than not limited to the distal few centimeters. It is interesting that perhaps the only true cryptitis occurs in gonorrhea. Pus can often be seen in droplets at the crypt, which may well be the cause of the extreme pain. A gonorrhea culture should be taken immediately to confirm the impression. The gonorrhea culture has a significant percentage of false-negative results, however, and a gay male with a painful proctitis should probably be treated for gonorrhea before awaiting the results of the culture. Biopsy of the proctitis will yield severe acute and chronic inflammation. Granulomas have been reported in these biopsies, but granulomatous proctitis disappears with the treatment of the disease. Symptomatic relief from the pain often follows shortly after initiation of treatment; however, the anatomic defect, that is the proctitis itself, may take several days or longer to disappear. We have noted, anecdotedly at this time, that abscesses seem to be found more frequently in patients who have had gonorrheal proctitis than in the general population. Although the hard data are not yet available, we hope to be able to prove the association.

Lymphogranuloma venereum produces strictures and proctitis that may also be difficult to distinguish from the idiopathic type. Appropriate serologic testing and biopsy can be extremely helpful in differentiating the proctitis in these cases. Herpes virus may cause proctitis and is important in the differential diagnosis of severe rectal pain, which will be discussed later.

Bacterial and parasitic infections are often etiologic in coloproctitis in the gay community. Any of the diseases previously regarded in the realm of tropical medicine are now being found in almost epidemic proportions among the gay population. Among the most common of these is amebiasis. Amebiasis usually presents as vague, crampy abdominal pain, flatulence, and diarrhea. Although severe amebiasis is uncommon, it may be seen.

Examination of the rectum and colon often reveals diffuse mild to moderate proctocolitis that may be limited to the rectum. Tiny red ulcers with white centers are sometimes present. Stool tests for parasites will reveal any number of species of pathogenic and nonpathogenic amoebas. The most commonly encountered is *Entamoeba histolytica*. Treatment may be either with metronidazole, diiodohydroxyquin, and/or paromomycin, as well as other medications or various combinations.

Shigellosis is commonly seen as well. This condition usually presents with severe diarrhea, which may be bloody, and is often accompanied by high spiking fevers.

Other infections and infestations are also seen, including salmonellosis, giardiasis, *Taenia saginota*, and strongylodiasis. So-called nonspecific proctitis may also be secondary to the more obscure etiologic agents such as *Chlamydia*. More bacteriologic work clearly needs to be done in this field.

Generally speaking, the major problem in most proctitis and proctocolitis encountered in the gay population is differentiation from idiopathic proctosigmoiditis and proctocolitis, as mentioned earlier.

Since members of this population are also as apt as anyone to contract ulcerative colitis or Crohn's disease, the usual workup, consisting of biopsy, barium enema, and colonoscopy, may need to be performed. It is important, however, before embarking on such a workup, to consider the specific etiologies of the proctitis.

Severe anorectal pain. Severe anal pain can be divided into several diagnostic categories. As mentioned previously, gonorrheal proctitis is a common cause. In fact, a painful proctitis is essentially pathogonomonic for gonorrheal proctitis, which responds within several days to appropriate treatment for gonorrhea.

So-called perianal and perirectal abscesses are often common causes of severe rectal pain. It should be noted, as previously mentioned, that there may be some relationship between gonorrheal proctitis and abscess formation. In the etiology of the rectal abscess, the cryptoglandular epithelium of the distal rectum is considered of importance. The anal gland ramifies in the intermuscular space between the internal and external sphincter muscles. An infection in the intermuscular space gives rise to the intermuscular abscess. The abscess can follow various routes around the rectum and form resultant fistulae. Fistula formation may be expected to occur in two thirds of patients who have rectal abscesses. Since gonorrheal proctitis causes a true cryptitis, the apparent frequency of the development of abscesses and fistulae in patients with gonorrheal proctitis should be expected.

Another cause of severe rectal pain is the anal fissure. Typically, the anal fissure is painful during or shortly after a bowel movement. The pain may last a variable length of time, from minutes to hours, and then it subsides until the next bowel movement. It is important to note that the primary chancre of syphilis may present as a very painful fissure and must be differentiated from the idiopathic fissure. The chancre often appears to be an atypical ulcer rather than a typical fissure; the typical fissure usually occurs in the posterior midline and less commonly in the anterior midline.

A hemorrhoid that is either acutely ulcerated or thrombosed can cause anal pain. It is our impression that thrombosed hemorrhoids and idiopathic fissures in the anus are less common in the gay population than in the heterosexual population. One may speculate that anal dilatation may protect the patient from these diseases. The Lord procedure, which has not been popular in the United States but is utilized in England, consists of a forceful anal dilatation for the treatment of hemorrhoids.

Other causes of pain around the anus would include fungal and viral infections. It is common to see a patient with severe rectal pain with multiple herpetiform lesions around the anus that are vesicular in nature. It is tempting to call these lesions true herpes. It is interesting that they often respond to the application of amphotericin B cream and, in fact, may represent candidiasis. There is a true perianal herpes syndrome that is less commonly seen in which the patient will have neurologic manifestations, including paresthesia and bladder dysfunction.

Last in the discussion of infectious diseases we should consider condyloma acuminatum, the common venereal wart, which must be differentiated from the syphilitic lesion, or condyloma latum. Warts may be found elsewhere on the genitalia, but limiting the discussion to the anorectal area, they are found both perianally and in the anal canal.

In the study described previously, 94% of patients with warts had intraanal lesions, alone or with perianal lesions as well. Thus, it is important to perform a careful anoscopic and proctosigmoidoscopic examination. The perianal warts may be of different varieties, the most common being a rather typical white, friable, cauliflower-looking growth. Intraanal warts are usually grouped around the dentate line, may be circumferential, and may be seeded on the rectal mucosa as well. Typically, the patient with these warts is between 15 and 30 years of age. Although the majority of patients with anorectal condyloma acuminatum have had rectal intercourse, 10% to 20% have not. In the latter group, the warts are commonly limited to the perianal region. It is important to differentiate condyloma cuminatum from more virulent diseases in the anal canal, and, therefore, we biopsy one of these warts in virtually every patient. We have come up with numerous cases of perianal Bowen's disease and perianal Paget's disease, and we have a series of patients with anal canal and perianal squamous cell carcinomas. Although most carcinomas were clinically obvious, perianal Paget's disease and perianal Bowen's disease, as well as occasional frank squamous cancers, can easily be confused with warts.

Bowen's disease is treated by excision and careful follow-up to reexcise recurrent areas. Extramammary Paget's disease, of course, is highly associated with visceral carcinomas and requires not only local treatment but search for associated cancer. The squamous cell carcinomas of the anal canal are now being treated by us on a protocol that includes a combination of chemotherapy, radiation therapy, and surgery.

Noninfectious venereal conditions

This category includes patients suffering the consequences of traumatic injuries,[2] although some of these consequences are, in fact, infectious. The use of rectal instrumentation with the dildo is extremely common in the gay population.[3] Dildos and other foreign bodies lost in the rectum have been reported on numerous occasions. Of the patients with lost rectal dildos, 1.5% are female and 0.5% are non-homosexual males. The following protocol for removal of these is recommended.

Assuming that the abdomen is benign, that there are no signs of perforation, and that rectal examination reveals the dildo within the reach of the finger, the patient is placed in the prone jackknife position on the examining table. A pararectal block is placed utilizing 0.5% bupivicaine, epinephrine, and hyaluronidase. This is, in fact, the anesthesia we use for most of our anorectal surgery; it affords total relaxation of the anal sphincter. With relaxation of the anal sphincter, the foreign body can easily be removed utilizing a tenaculum or Alyce clamp. Hospitalization and general anesthesia are not required for removal of these foreign bodies in uncomplicated cases. If the dildo or foreign body cannot be felt with the examining finger, the patient is admitted to the hospital, and in the vast majority of cases, peristalsis carries the foreign body down into the rectum over 12 to 24 hours of observation. There are, of course, exceptions to this. Also, very large foreign bodies that are difficult to grasp may require laparotomy and "milking" of the foreign body down into the rectum where it can be removed. Only occasionally is a colotomy necessary. (Opening of the abdomen does not necessarily mean that the colon will have to be opened in order to remove the foreign body.)

The above is predicated on the fact that the colon has not been perforated. Perforation of the colon would, of course, require appropriate surgery. Of our last 150 cases involving intrarectal foreign bodies, only two required general anesthesia for transanal removal and one required a laparotomy.

I would like to turn our attention next to the injuries found secondary to fist fornication. There is a segment of the gay community that indulges in fist fornication, in which the partner's fist is inserted into the rectum for sexual gratification. The members of this group tend to be older than nonparticipants. They range in age from approximately 30 to 50 years; however, both younger and older participants have been noted. Fist fornication, which involves the fist being inserted multiple times into the recipient's rectum, is performed with the recipient, as a rule, heavily sedated with various drugs. Because of this polypharmacy, including LSD, barbiturates, amphetamines, methaqualone, marijuana, etc, behavior of the patient who is injured can be quite bizarre, and multiple injuries have occurred following fist fornication. Often one sees a mild to severe proctitis, which may be due to mechanical or chemical irritation from drug or alcohol enemas or to gonorrhea that was transmitted during or prior to the episode of fist fornication.

Lacerations and abrasions are extremely common, and the former can lead to exsanguinating hemorrhage requiring control under anesthesia by suturing. There are often multiple perianal ecchymoses and hematomas. Rectal or rectosigmoid perforations occur. The perforations may be in the free peritoneal cavity, in which case fecal peritonitis ensues, requiring laparotomy with appropriate surgery, usually consisting of end-sigmoid colostomy and Hartmann's pouch. Because many of the recipients have been prepared with enemas prior to their encounter, there is often a mechanical bowel prep already in effect at the time of the injury. If there is a mucosal tear in the lower rectum or the midrectum, the usual problem encountered is that of hemorrhage, which can be controlled with suture ligation. Primary repair of a sphincter laceration is often possible.

There is a syndrome that we have described secondary to fist fornication.[4] The patient presents several hours after injury, and he is noted to have fever, with or without severe rectal pain. Sigmoidoscopy does not reveal a perforation or significant tear in the rectum, although there is usually moderate to severe proctitis. Abdominal examination may be difficult to assess, but there may be lower abdominal tenderness.

The first patient we encountered of this type we hospitalized, placed on antibiotics, and followed with abdominal examination. There were no progressing abdominal signs; however, the patient's fever continued to rise, and he underwent laparotomy. Upon exploration, retroperitoneal edema in the rectorectal space and pelvis was noted. There was no perforation of the colon or rectum that could be grossly identified, and there was no free fluid in the abdomen. The area was drained, and a sigmoid colostomy was performed. The patient defervesced rapidly after this, and following an appropriate recuperation period, intestinal continuity was reestablished. Having learned from this experience, the next several patients we encountered with this condition were treated with broad-spectrum antibiotic therapy while being closely followed for the development of peritonitis. They all responded to this regimen, and laparotomy was avoided.

Lastly, we would like to consider the rectal complications of the venereal administration of enemas. The administration of enemas has proliferated in recent times both for venereal and nonvenereal purposes. We have all heard of the coffee enema being used in the treatment of cancer. In the past several years, there have cropped up many so-called nutritionists who have taken to advising the use of enemas that are said to cleanse the body of poisons. Complications of these administrations have been seen, including perforation of the rectum. Venereally administered enemas are becoming more and more popular. Prior to sexual activity, many participants will use an enema or "douche" for "aesthetic" purposes. Enemas containing various chemical substances have been coming into vogue. Enemas containing drugs (as well as direct administration of drugs per rectum) have been used with increasing frequency. Various alcoholic beverages, especially wine, have been used frequently in this setting. One of our patients with a colonic perforation due to fist fornication had, prior to his trauma, used a wine and mushroom enema. Mushrooms were found floating free in the peritoneal cavity at the time of laparotomy.

It is generally considered that these various enemas can cause varying degrees of proctitis. Clearly, a careful history is needed since these practices can become confused with other causes of proctocolitis.

Summary

The traditional concepts of venereal disease have undergone great changes in the past decade. Because of the rapidly expanding gay population, colon and rectal surgeons, as well as physicians in general, are seeing problems that are outside the realm of traditional experience. Many of the venereal diseases encountered in the male homosexual were not previously considered venereal in origin and will require an expanded awareness on the part of the physician.

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Mutual Aids
Radiologist and Endoscopist

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Carcinoma of the colon represents the second most common cause of death by carcinoma in the United States. In men, it is second only to carcinoma of the lung, and in women, it is second to carcinoma of the breast. Cancer of the colon effects 100,000 people annually. Of these, 50,000 die yearly, accounting for 2.4% of all deaths in the United States. In other words, 1 in 40 people will die of carcinoma of the colon.

Polyps

Despite improved diagnostic and surgical techniques, the prognosis of colorectal carcinoma has remained almost stationary over the past two decades with an overall five-year survival rate of approximately 30%. Like many other cancers, if the diagnosis is made when the lesion is small, the survival rate is much higher. The survival rate is improved also if one understands that adenomatous polyps may be precursors of colorectal cancer. There is now convincing data accumulated to indicate that benign adenomas, both adenomatous polyps and villous adenomas, are the precursors of the majority of carcinomas of the colon. Evidence for this adenoma-carcinoma sequence includes the finding that benign tumors occur in physical continuity with carcinoma. Also, careful histologic study of malignant tumors reveals all gradations from adenomatous polyp to adenomatous polyp with a focus of invasive carcinoma to an obvious cancer. As polyps increase in size, there is an increasing frequency of cellular atypia. The frequent coexistence of benign and malignant lesions in the same colon, as well as the invariable development of carcinoma in patients with familial polyposis who do not have a colectomy, further confirms the relationship between adenomatous polyps and carcinoma. Finally, the systematic removal of polyps during colonoscopy has reduced the anticipated incidence of carcinoma in those patients.

Morson[1,2] has shown the relationship between polyps of the colon and carcinoma. The single most important relationship is between the size of a polyp and malignancy. Data from St. Mark's Hospital[2,3] indicate that the malignant potential is very low for polyps 1 cm and less in diameter with a 1% to 2% incidence of carcinoma, while carcinoma occurs in 50% of those over 2 cm in size.

Morson[3] also believes that the polyp-cancer sequence takes place slowly, over a period of ten to 15 years, but may take as little as five years or as long as 25 years. This has obvious implications in terms of patient management and suggests that follow-up examinations by barium enema study or colonoscopy at three-year intervals would be appropriate if the last examination was tumor free. If, however, a small polyp was not removed for medical reasons, it should be followed at yearly intervals.

Methods

Having noted the importance of polyps in the development of cancer, what is the role of the colonoscopist and the radiologist in the detection of polypoid lesions of the colon and rectum? The primary responsibility for the detection of rectal pathology to

Presented at the Section of Gastroenterology, Colon and Rectal Surgery and Radiology. Colonoscopy—Uplook for the 80s on Friday, June 26, 1981.

include polyps belongs to the endoscopist. Although proctoscopy is the preferred method for examination of the rectum, radiographic studies of the colon should always include careful examination of the rectum as an adjunctive method that can yield useful information. Definitive, prospective studies comparing the accuracy of the two modalities in the detection of colon polyps exclusive of those in the rectum have not been done. Retrospective studies suffer from many points of view since they are not double-blind comparisons, and observer bias is not eliminated. When comparing colonoscopy with barium enema examinations, colon cleansing is often not comparable, and expertise of individuals doing the study varies. The colonoscopist knows the result of barium or air-contrast studies, but the reverse is seldom true since the radiologic examination most often precedes colonoscopy. Colonoscopy is also usually the end point and gold standard used in determining whether polyps are present, and there is usually no examination following colonoscopy to check out the false-negatives that may result from such an examination.

Lesion size

The size of lesions is also very important, since those under 5 mm are insignificant, and yet most published series lump all polyps together when discussing the diagnostic yield with both modalities. There is no doubt that colonoscopy can detect smaller polyps than barium enema studies in the 5 mm or under range, but it should not be used in scoring one modality against the other since the 5 mm and smaller lesion is of no clinical importance.

Detection

The complimentary role of both colonoscopy and radiology should be stressed. The radiologist must assume the major responsibility, however, for early detection of colon lesions above the rectum and assume complete responsibility for the procedure, including the preparation of the patient. He must have as complete control as the colonoscopist since most lesions are missed because of poor preparation or poor technique. If the initial preparation of the colon is unsatisfactory and will not permit a definitive study, the radiologist must direct the repreparation of the colon by either the patient, nursing staff, or personnel in the radiology department so that a diagnostic study can be performed and a report submitted which will not equivocate because of retained feces.

The number of polyps discovered by barium enema examination varies considerably, depending upon the technique employed. Welin[4] performed 36,000 air-contrast studies over a 13-year period and found polyps in 12.5% of the patients, the same as reported in postmortem studies at his hospital. Williams[5] reported a series of 182 patients in which routine barium enema examinations missed 43% more tumors than air-contrast techniques. Up to 60% of polyps diagnosed by the air-contrast examination are less than 5 mm in size. Most authorities are in agreement that air-contrast examinations of the colon are superior to the routine barium enema in the detection of early polypoid lesions.

Air-contrast examinations should probably be performed as a primary examination in the following instances:

- rectal bleeding or hemoccult positive stools
- polyps found on proctosigmoidoscopic examination
- past history or family history of colonic polyps or cancer
- clinical impression of colonic cancer
- patients over 40 years of age
- inflammatory bowel disease

In those patients who are too elderly or too sick to have a competent air-contrast study and in whom the detection of polyps is less significant, a single-column barium enema examination is adequate.

There are, of course, disadvantages to the air-contrast barium enema technique. Interpretation of the examination is more difficult, but this is easily overcome by additional training and experience with the technique. The quality of the examination is more variable and dependent upon multiple factors, including preparation of the patient and the skill of both the radiologist and the radiographer. A poor quality air-contrast examination can be more dangerous than a regular barium enema. Other disadvantages of the technique, including the greater period of time required to perform the examination as well as the fact that it is more expensive, are disavowed by the staunch supporters of the air-contrast technique.

Some of the disadvantages of colonoscopy would include such factors as the inability to do a complete study, endoscopic blind spots, and the fact that this examination is also very time consuming and expensive. Colonoscopy does not appear suitable for screening purposes.

The major complications of the barium enema or double-contrast enema include perforation, laceration, or abscess formation. These complications can also be encountered in colonoscopy, in addition to the risks of hemorrhage, rupture of a diverticulum, mesosigmoid hematoma, splenic injury on withdrawing the instrument, and incarceration of the instrument in a hernia. The incidence of complication from either procedure, however, is very low.

Comment

The radiologist and colonoscopist must keep in mind the fact that carcinoma of the colon is a common disease, increasing in incidence from about age 40, that the prognosis of cancer of the colon is directly linked to the stage of diagnosis, and that the prognosis has not changed significantly in the past 20 years. Therefore, it is incumbent upon radiologists and colonoscopists to reevaluate the procedures in their practice to assure that their technique provides the greatest degree of sensitivity possible. For the radiologist, this would include improving the preparation of the patient and the quality of the examination. The radiographic examination should be tailored as any other roentgen study to the specific needs of a particular patient. This would include selecting the type of examination, ie, solid-column or air-contrast examination on an individual basis.

Turnbull[6] reported an 81% five-year survival rate for early carcinoma of the colon and a 14% rate for extensive lesions. Since the air-contrast examination or barium enema is the primary screening method for the detection of colon pathology above the rectum, the radiologist has to assume the major responsibility for the detection of early lesions. The examination that he performs must be left to his discretion, based upon the circumstances of the individual case. The air-contrast colon examination in the appropriate setting should be the examination of choice for those patients in the high-risk colon cancer group. This examination may often be complemented by endoscopy. Proctoscopy, however, is the preferred method for study of the rectum. Even with the use of each method or a combination of methods in the best possible hands, some lesions will be missed. This does not imply incompetency but simply indicates that each method has its limitations. Both the radiologist and the endoscopist should make every effort to use the best techniques available, for missing the lesion is the grave error that most frequently bears the greatest consequence to the patient.

Summary

Carcinoma of the colon is the second most common cause of death by cancer in the United States. The prognosis of colorectal carcinoma has remained stationary during the past two decades. If the diagnosis is made earlier and it is understood that adenomatous polyps may be cancer precursors, the survival rate and incidence can be significantly altered.

The complementary role of both radiology and colonoscopy in early detection should be stressed. The air-contrast barium enema is the primary screening method for detection of early lesions. This examination may be complemented by endoscopy in certain cases or in those patients in the high-risk cancer group.

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Laryngeal Electromyography

Clinical application

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Electromyography (EMG) of the intrinsic muscles of the larynx provides a useful clinical tool in evaluating patients with pathology of the vocal cords. In the classic and exhaustive investigation by Faaborg-Anderson,[1] EMG findings were determined in both normal patients and in those with vocal cord paralysis. Faaborg-Anderson illustrated the clinical correlation of various pathologic conditions and their apparent EMG records. Dedo[2] provided corroborating evidence, stressing the importance of bipolar electrodes.

A simple method of percutaneous laryngeal electromyography (LEMG) has been described that permits access to the two primary areas of innervation, that is, the superior laryngeal nerve and the recurrent laryngeal nerve.[3] This test may be done even as an outpatient in a conventional EMG lab. We would like to describe our experience with this

Presented at the Section on Otolaryngology and Maxillofacial Surgery; Advances in Otolaryngology. Friday, June 26, 1981.

technique, demonstrating its clinical usefulness in both diagnostic and prognostic capacities.

Anatomy-physiology

To appreciate the findings of the LEMG, a concise reference to the anatomy and physiology of the larynx is in order.[4] The larynx is a paired organ with the primary function of respiration, protection of the airway, and phonation. There are several intrinsic muscles coordinating the activity of the larynx. They may be classified according to function—adduction or abduction—or, more germane to the LEMG, according to their respective nervous innervations, that is, the superior or recurrent laryngeal nerves.

The superior laryngeal nerve branches from the vagus nerve at the lower end of the nodose ganglion and passes downward medial to the internal and external carotid. As it curves downward it divides into a small external and large internal branch. The external branch terminates in the cricothyroid muscle, which rotates the cricoid and arythenoid cartilages inferiorly from the thyroid cartilage, resulting in increased tension and adduction of the vocal cord. The internal branch penetrates the thyrohyoid membrane to supply sensation to the supraglottic area of the internal larynx.

The recurrent laryngeal nerve runs upward in the groove between the esophagus and trachea, the right recurrent coursing around the right subclavian artery while the left traverses a much greater distance, circumventing the aorta at the ligamentum arteriosum. The nerve then enters the larynx just behind the cricothyroid articulation and supplies all the remaining intrinsic muscles, which include the posterior cricoarytenoid (only abbuctor), the thyroarytenoid, vocalis, lateral cricoarytenoid, and the arytenoideus (all adductors). Injury to one or both laryngeal nerves will result in alteration of vocal cord function and position. An isolated injury to the superior laryngeal nerve does not affect mobility, but the cord may appear foreshortened and lowered with the glottis rotated posteriorly to the affected side. The patient may have difficulty attaining high tones, or there may be no symptoms associated with this.

An isolated lesion of the recurrent laryngeal nerve will lead to vocal cord paralysis in the paramedian position. The patient may present with a breathy voice or, again, may be asymptomatic, as the opposite cord may compensate for the paralyzed side.

An injury to both nerves of the same side will result in a vocal cord paralysis in the intermediate position, in which case, the patient will generally present with a breathy voice. Bilateral vocal paralysis will be seen when both sides are affected. If all four nerves are involved, the patient presents with a breathy voice, somewhat compromised airway, and a history of aspiration. If only the recurrent laryngeal nerves are involved, both cords are fixed in the paramedian position, and the patient has little if any airway. The patient presents with upper respiratory obstruction, which necessitates control of the airway to prevent a respiratory arrest.

Methodology

Two muscles are sampled: the thyroarytenoid and the cricothyroid to evaluate the recurrent laryngeal nerve and the superior laryngeal nerve, respectively. The patient is placed in a recumbent position with the head and neck slightly extended. A standard bipolar concentric medial electrode is used. The length of 7.5 cm is required to sample the deeper thyroarytenoid muscle, and a shorter needle (2 cm) is necessary for sampling the cricothyroid muscle. The electrical activity is suitably filtered and connected to a standard general electromyograph. Activity is inspected on the oscilloscope screen, monitored through a loudspeaker, and recorded on film or paper. The skin is first anesthetized with 1% lidocaine (Xylocaine). To sample the muscle fibers of the thyroarytenoid, the longer needle is inserted midline through the skin and cricothyroid membrane and is directed approximately 20° laterally and 45° superiorly. The needle passes submucosally without resistance and is inserted to a depth of 2.5 to 5 cm under visual and loudspeaker control. The patient is required to say "E" repeatedly, and as the recording needle approaches the fibers of the thyroarytenoid or adjacent muscles, action potentials are detected. These motor unit potentials (MUPs) are diphasic or triphasic of 3 to 6 ms duration. The action potential activity becomes higher in amplitude and crisper or sharper in sound as the muscle fibers are entered. Muscle atrophy will result in a decreased number of MUPs.

The cricothyroid muscle is sampled with the shorter needle. The skin is similarly anesthetized and then the needle is inserted about 1 cm from the midline over the lower aspect of the thyroid cartilage to the depth of a few millimeters. The patient is again instructed to say "E," and one looks for action potentials as previously described. Resuscitative equipment is within close proximity, although there has been no occasion to use it.

If there is denervation of these muscles, spontaneous discharge of muscle fibers occurs, seen as fibrillation potentials. These are small potentials with a deviation of 0.5 to 2 ms. Monophasic potentials or positive waves may also be seen. Reinnervation results in polyphasic potentials, prolonged MUPs with four or more phases. These are recorded when muscles are recovering their function and are seen even before clinical signs of movement.

Results

Table I summarizes the findings of laryngeal electromyography (LEMG) in the 20 cases studied by us. In some instances, we performed LEMG of the thyroarytenoid muscle under direct vision in the operating room. In these circumstances, we were

TABLE I. Laryngeal Electromyography—Clinical Results

Case No.	Age (yrs)	Appearance of Vocal Cords	Diagnosis	Left TA	Left CT	Right TA	Right CT	Comment
1	62	(L) vocal cord paralysis in paramedian position	Idiopathic	Poly MUPs	Poly MUPs	N1	N1	Recovered spontaneously
2	27	(R) vocal cord paralysis in paramedian position	(R) Neck trauma	N1	N1	Absent MUPs	Absent MUPs	High vagal lesion; no recovery but (L) compensation
3	70	(L) vocal cord paresis	ALS	Poly MUPs	BHFD	Poly MUPs	Poly MUPs	ALS by skeletal EMG; dysphagia permanent
4	72	NL	Palatal myoclonus	N1	N1	Myoclonus	Myoclonus	N1 phonation with articulation problems
5	74	Bilateral vocal cord paralysis in midline	Idiopathic	N1		Rare MUP Fibs		Succinycholine did not abolish fibs; tracheostomy
6	70	(L) vocal cord paralysis in intermediate position	Jugular foramen syndrome	Fibs	↓MUPs	N1	N1	(R) Cord compensated
7	31	(L) vocal cord paralysis in intermediate position	? Charcot-Marie-Tooth disease	N1	N1	N1	N1	Suspect mechanical problem
8	31	(L) vocal cord paralysis in intermediate position	? Charcot-Marie-Tooth disease	N1	N1	N1	N1	(L) Teflon cord injection
9	69	NL	Scleroderma	N1	N1	N1	N1	Dysplasia (permanent)
10	60	(L) vocal cord paralysis in intermediate position	(L) pneumonectomy	No MUPs	No MUPs	N1	N1	(L) Teflon cord injection
11	79	Bilateral vocal cord paresis	S/P vagotomy	N1	N1	N1	N1	Recovered spontaneously; mechanical problem
12	41	Bilateral vocal cord paralysis in midline	Idiopathic	No MUPs	N1	No MUPs	No MUPs	(R) Aryteroidectomy
13	45	Bilateral vocal cord paralysis in midline	Anaplastic carcinoma of thyroid	N1	Fibs No MUPs	No MUPs	No MUPs	Tracheostomy
14	54	(L) vocal cord paralysis in intermediate position	Oat cell carcinoma (L) lung	Fibs	N1	N1	N1	(L) Teflon cord injection
15	72	(L) vocal cord paralysis in intermediate position	(L) glomus jugulare	Poly MUPs	Poly MUPs	N1	N1	(L) Teflon cord injection
16	65	N1	Pseudo bulbar palsy from CVA	N1	N1	N1	N1	Articulation problem
17	67	(L) vocal cord paralysis in intermediate position	(L) carotid sheath tumor	Poly MUPs Fibs	Poly MUPs	N1	N1	(L) Teflon cord injection
18	62	(L) vocal cord paralysis in intermediate position	S/P (L) carotid endarterectomy	PSW Fibs	N1	N1	N1	(L) Teflon cord injection
19	44	(R) cord shortened	Idiopathic	N1	N1	N1	↓MUPs	Spontaneously resolved
20	48	N1	Episodic choking	N1	N1	N1	N1	Observation

Key: MUP = Motor unit potential; Poly MUP = Polyphasic motor unit potential; Fibs = Fibrillation; PSW = Positive waves; BHFD = Bizaare high-frequency discharge

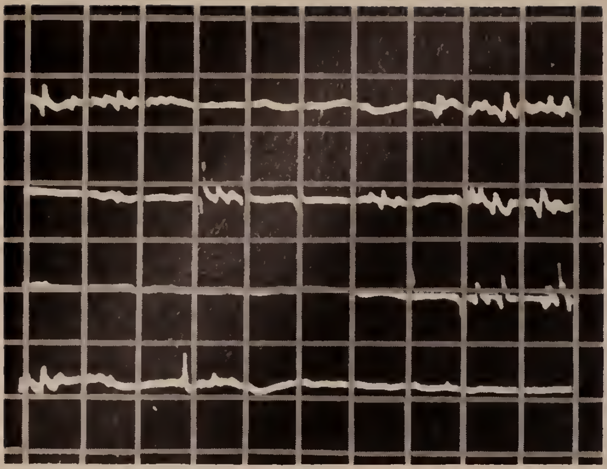

FIGURE 1. LEMG of Case 1, demonstrating polyphasic MUPs in left thyroarytenoid muscle. Scale: X axis 12 mm = 10 ms; Y axis 12 mm = 500 mcv.

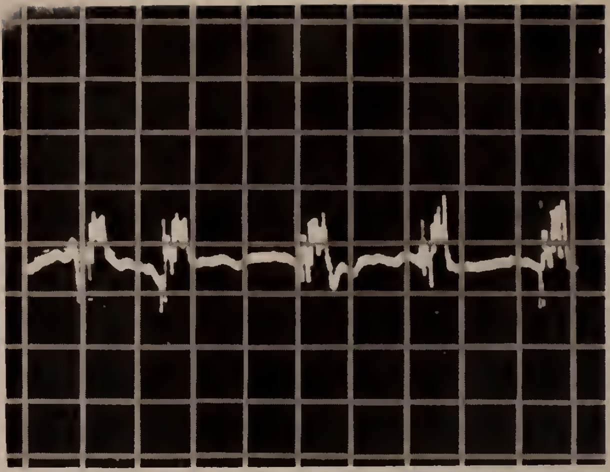

FIGURE 3. LEMG of Case 3. Numerous polyphasic MUPs are seen in left thyroarytenoid muscle. Scale: X axis 12 mm = 20 ms; Y axis 12 mm = 200 mcv.

able to administer curare or succinylcholine in appropriate instances. These neuromuscular blocking agents abolished the involuntary movements, or myokymia, but not the fibrillations and positive waves. This is the expected behavior of these spontaneous activities, since the former originate in axons proximal to the neuromuscular junction, and the latter arise distal to this site and in the muscle membrane itself. Following are several illustrative cases presented in detail.

Case 1. A 62-year-old female presented with a mild degree of hoarseness and, on exam, was noted to have a left vocal cord paralysis. The remainder of her examination was normal. On LEMG (Fig 1), the left cricothyroid and thyroarytenoid muscles revealed numerous polyphasisc MUPs. Based on this finding, definitive therapeutic intervention was postponed. Follow-up examination six weeks later revealed a return of mobility on the left side. Serial follow-ups confirmed the recovery, which was complete 14 months after the detection of the paralysis. In this instance, LEMG prognosticated the potential for recovery, so that unnecessary therapeutic procedures were avoided.

Case 2. A 27-year-old man received blunt trauma to the neck with resulting paralysis to the right vocal cord. No MUPs were detected in either the cricothyroid or the thyroarytenoid muscles on the right, whereas MUPs were normal and recruitment was good on both muscles of the left side (Fig 2). Since both muscles were involved on the right side, the responsible lesion was localized to the vagal trunk in the neck proximally.

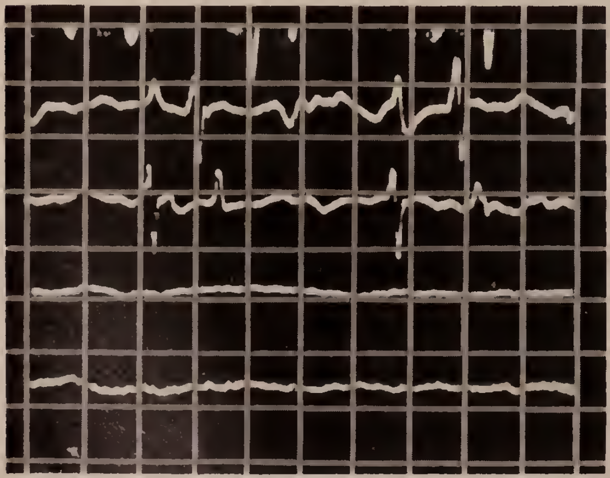

FIGURE 2. LEMG of Case 2. No electrical activity noted when right thyroarytenoid is sampled (lower two tracings). Left thyroarytenoid muscle demonstrated normal activity (upper two tracings). Scale: X axis 12 mm = 10 ms; Y axis 12 mm = 100 mcv.

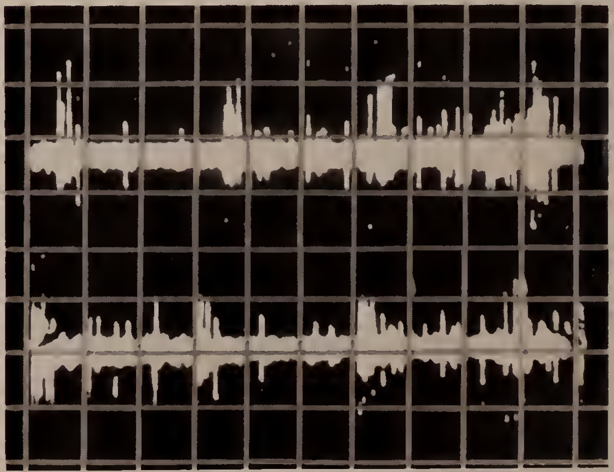

FIGURE 4. LEMG of Case 4. Spontaneous discharges are seen in right cricothyroid, syncronous with the palatal myoclonus. Scale: X axis 12 mm = 200 ms; Y axis 12 mm = 500 mcv.

Case 3. A 70-year-old woman presented with dysphasia of recent origin. She had normal vocal cord mobility on her examination. However, LEMG revealed numerous long duration polyphasic motor units in both muscles bilaterally (Fig 3). Meanwhile, neurologic assessment and systemic EMG led to the diagnosis of motor neuron disease. Polyphasic and long-duration MUPs suggesting the occurrence of reinnervation are a characteristic feature of systemic EMGs in this disease. A similar process was probably underway in the laryngeal muscles also.

Case 4. Involuntary movements of skeletal muscles occur in several neurologic disorders. Although seizures and tremors are better-known examples, there are less familiar entities such as myoclonus and myokymia. In the case of palatal myoclonus in a 72-year-old female patient, we were able to demonstrate the occurrence of laryngeal muscle discharges synchronous with the palatal myoclonus (Fig 4). It is likely that laryngeal muscles were also exhibiting myoclonic discharges, despite their normal appearance on clinical examination.

Discussion

Laryngeal electromyography has proved useful as a clinical tool in evaluating patients with voice disorders. Prosek et al[5] used it in the form of biofeedback in the treatment of hyperfunctional voice disorders. In his study of six patients, 50% obtained a positive result by utilizing this technique to improve the quality of their voice. Another application for the LEMG was in the evaluation of patients with sleep apnea syndrome. Kurtz et al[6] studied seven patients using LEMG recordings of the cricothyroid during continuous sleep monitoring. They noted a tonic activity of the cricothyroid muscle with phasic inspiratory reinforcements during wakefulness, which decreased during sleep and was totally absent during episodes of hypopnea. The results favored a possible obstruction of the upper airway at the laryngeal level.

One of the most promising applications is in the evaluation of patients with a vocal cord paralysis. The interpretation of a patient's voice disorder or position of the cords may be very misleading. Oftentimes the patient may be asymptomatic. In addition, the position of the cords, ie, intermediate or paramedian, is quite subjective and open to various interpretations. It is particularly difficult to ascertain an isolated injury to the superior laryngeal nerve. LEMG, demonstrating many similarities to the more conventional skeletal EMG, can therefore provide objective evidence of the precise involvement of laryngeal nerves. Although the laryngeal MUPs are shorter in duration and smaller in amplitude than the units of most skeletal muscles, positive waves and fibrillations on insertion into a muscle indicate the presence of denervation. For example, if both the cricothyroid and thyroarytenoid muscles are abnormal, the lesion should be proximal, involving both the recurrent and superior laryngeal nerves.

The prognostic implications that may be derived from the findings on LEMG are also invaluable. Finding polyphasic potentials is an indication of possible return of function and will certainly affect the management of these patients. In several of our cases, the patients demonstrated these potentials and, therefore, were observed; they subsequently showed spontaneous return of vocal cord mobility. In contrast, there were other cases in which complete denervation was noted with no evidence of polyphasic potentials. It was felt that these patients would not have return of function and, therefore, they underwent an operative procedure to correct their problem.

Certain shortcomings of LEMG should be mentioned. The muscles examined are small, the technique of electrode insertion is blind, and patients are apprehensive, despite a low degree of discomfort. Thus, the failure to detect MUPs from a muscle need not indicate its absence or atrophy. It could well be the result of inability to gain access to that muscle due to technical failure. Another problem is the inability to examine numerous MUPs in quantitative detail, such as seen in skeletal muscles.

Summary

In summary, the LEMG has proved to be a valuable aid in the management of patients with voice disorders. Its diagnostic role is self-evident when one needs to understand the extent of the pathology. One can determine the precise nerve involvement and, therefore, can decide on further diagnostic tests. In addition, its prognostic implications aid in effecting management of these patients. The information obtained allows the physician to make decisions regarding treatment based on objective findings rather than on subjective interpretation.

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Vitrectomy as an Adjunct to Retinal Surgery

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The improved success in retinal detachment surgery can be attributed to improved methods of ophthalmoscopy and surgical techniques. In the past decade, the most significant advance in retinal surgery has been the introduction of intravitreous surgical techniques used in conjunction with standard scleral buckling. It is the purpose of this paper to illustrate some of these techniques in the management of complex retinal problems.

The pars plana region can be visualized at the time of surgery with the aid of transillumination (Fig 1). Current vitrectomy techniques often utilize two instruments simultaneously, requiring sclerotomies to be prepared parallel to the corneal limbus in the anterior portion of the pars plana region (Fig 2). Vitrectomy instruments have been designed with uniform diameters, which allow interchangeability of instruments during surgery (Fig 3).

Media opacities

Figure 4, (top), illustrates the eye of a patient who had an intraocular lens removed because of a sterile endophthalmitis. The pupillary membrane that subsequently developed prevented indirect ophthalmoscopy, although it was possible to diagnose a retinal detachment by ultrasonography early in the patient's postoperative course. Through a single sclerotomy, the pupillary membrane was fenestrated with the use of vitreous scissors. A vitrectomy cutter then replaced the vitrectomy scissors, and a total excision of the pupillary membrane was accomplished (Fig 4, bottom). Indirect ophthalmoscopy followed by standard scleral buckling enabled complete retinal reattachment.

Other opacities of the media, such as retained lens material, asteroid hyalitis, and vitreous hemorrhage, can be removed by similar techniques, allowing a clear view of the retina.

Giant retinal breaks

The giant retinal break, here defined as a retinal dialysis extending 90° or greater, often requires vit-

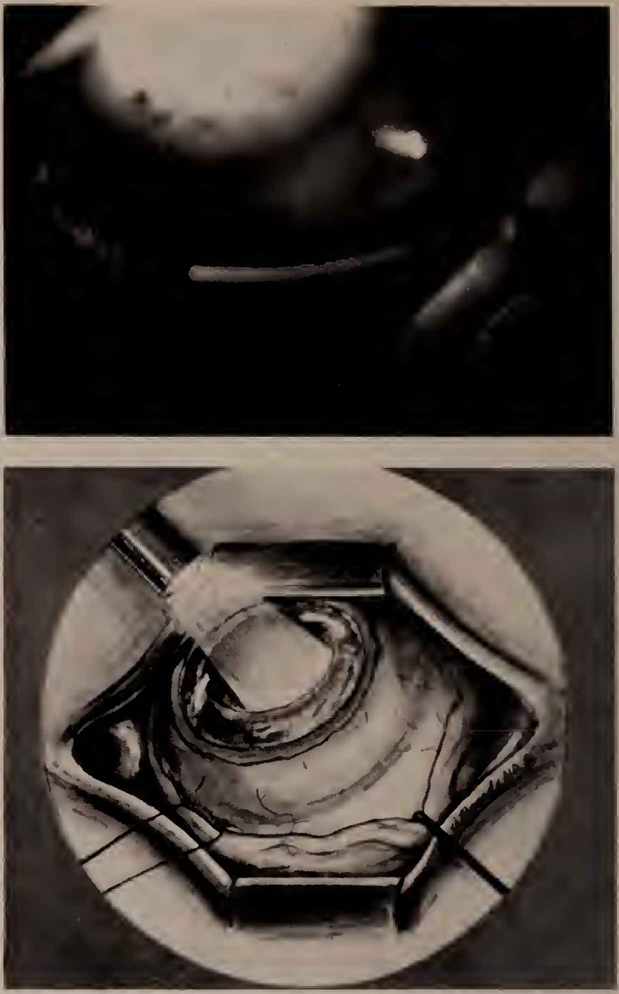


FIGURE 1. Artist's representation (bottom) and (top) actual surgical specimen demonstrating localization of pars plana region with transillumination.

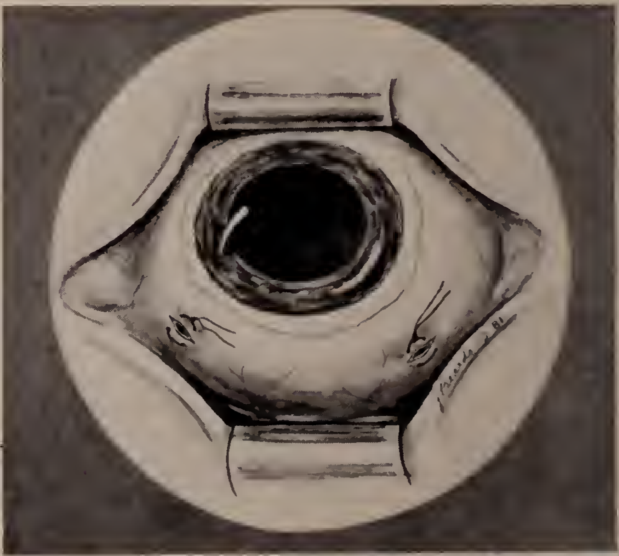


FIGURE 2. Two sclerotomies created for two-instrument vitrectomy technique.

Presented at the Emergency Medicine Session Jointly Sponsored by the New York State Chapter of the American College of Emergency Physicians section of the Ophthalmology program on Saturday, June 27, 1981.

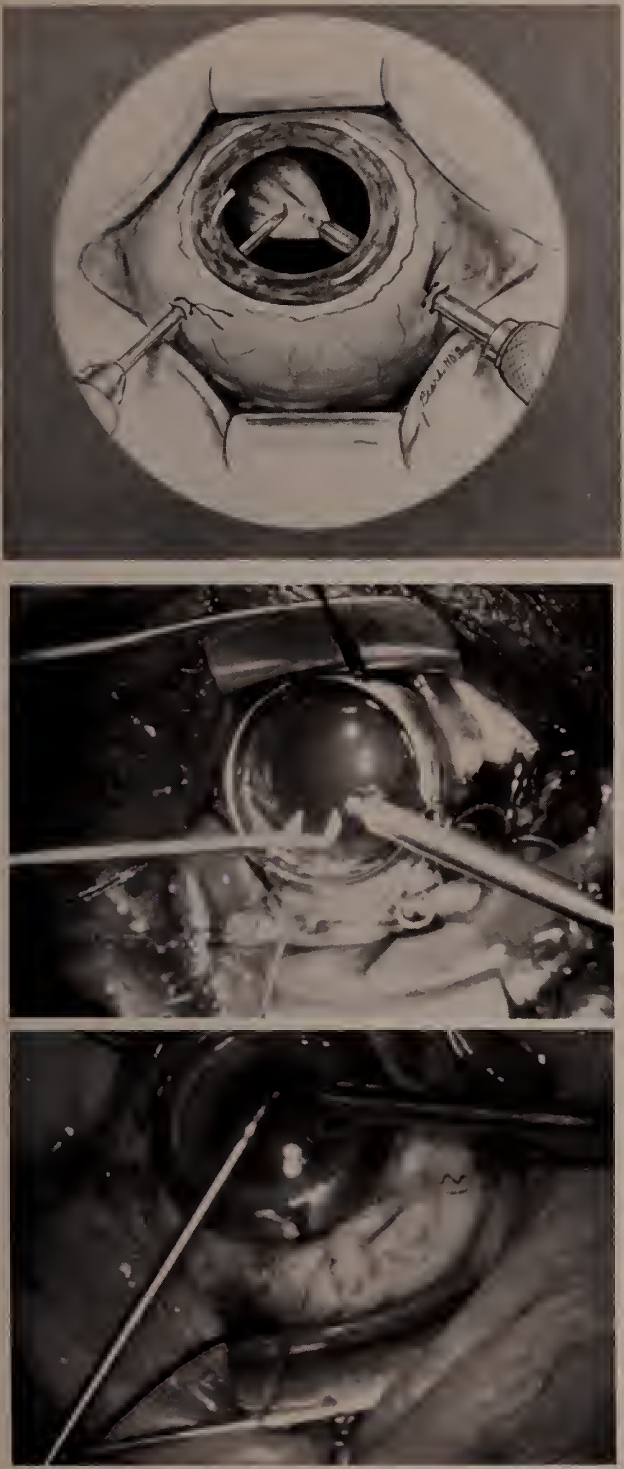


FIGURE 3. Vitrectomy instrument used in combination with vitreous pick (top), vitreous scissors (middle), and endodiathermy unit (bottom).

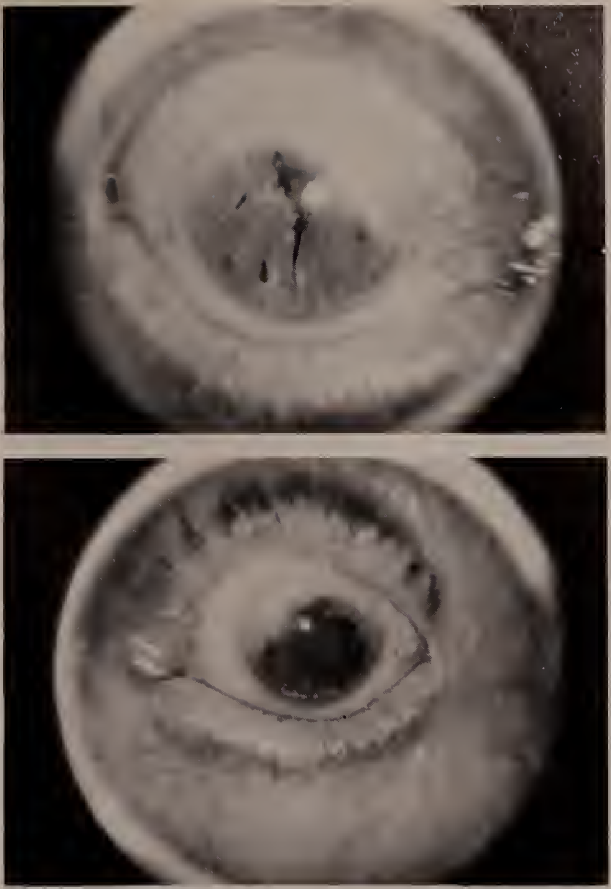


FIGURE 4. Pupillary membrane secondary to sterile endophthalmitis (top). Excision of pupillary membrane by vitrectomy techniques (bottom).

rectomy techniques to achieve successful reattachment. Complete inversion of the posterior flap occurs because of significant vitreous traction. Additionally, periretinal proliferation can occur, immobilizing this flap. Figure 5 involves the case of a young male who was referred after a car battery explosion. A standard vitrectomy instrument was used to evacuate most of the vitreous gel from the intravitreous cavity without sacrificing the patient's lens. Vitreous adherent to the posterior flap was carefully incised, as was vitreous gel still adherent to the anterior flap. A vitreous pick in combination with the vitrectomy instrument was used to unfold the flap. A standard scleral buckling procedure followed, in which approximately 2 cc of air was placed in the intravitreous cavity to help tamponade the retinal break in the proper position (Fig 5). Complete retinal reattachment was then achieved (Fig 6).

Traction detachments

Traction retinal detachments are most commonly seen in the diabetic patient with proliferative retinopathy in which fibrovascular proliferation from the optic disk and retinal surface to the posterior hyaloid has caused a retinal separation secondary to contracture of the vitreous gel. This is illustrated in Figure 7, which shows a traction detachment in a juvenile diabetic that involved both temporal arcades with the macula still attached.

It is the opinion of the author and others that in

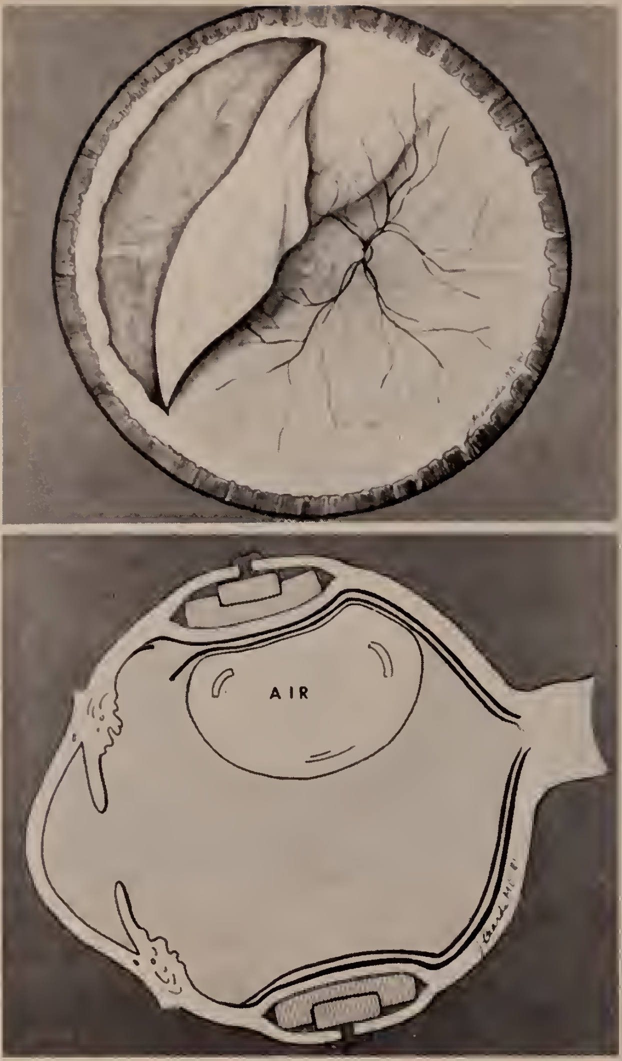


FIGURE 5. Giant retinal break with inverted posterior flap (top). Air tamponade of giant retinal break (bottom).

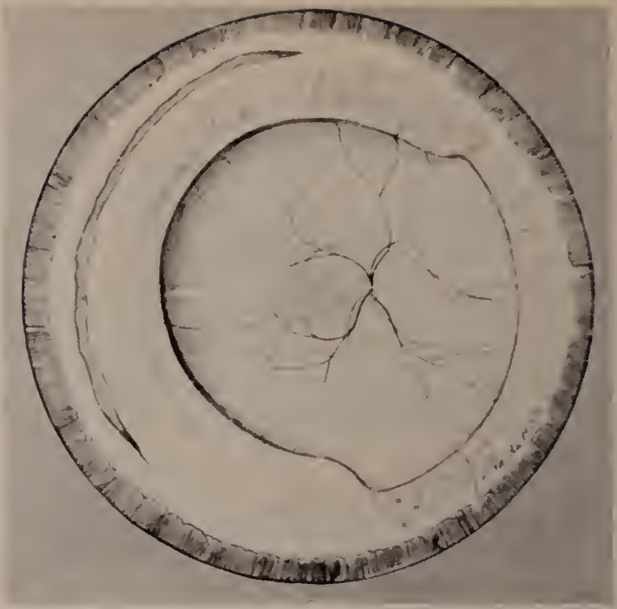
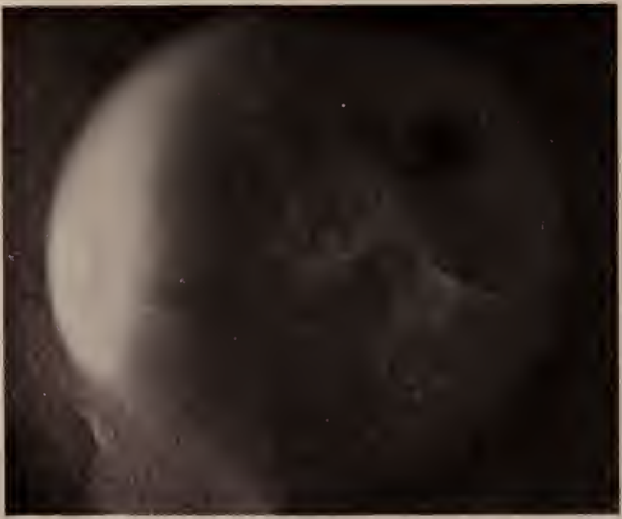


FIGURE 6. Artist's representation of postoperative result of case illustrated in Figure 5 top.

clear-media diabetic eyes a vitrectomy should be undertaken only when the traction detachment involves the macula. The rationale for this judgment involves three factors: (1) Traction detachments not involving the macula are often stable for many



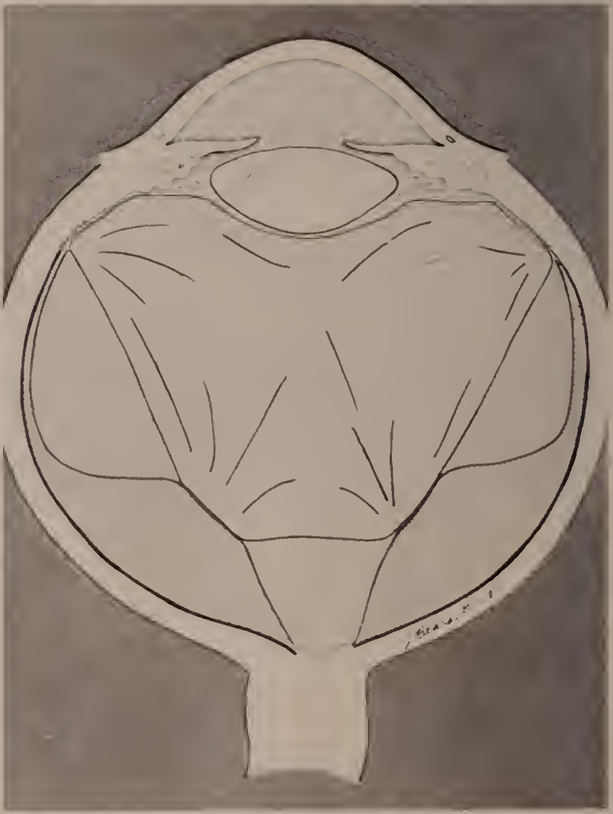


FIGURE 7. Cross-sectional view (right) and (left) wide-angle photograph of diabetic traction detachment.

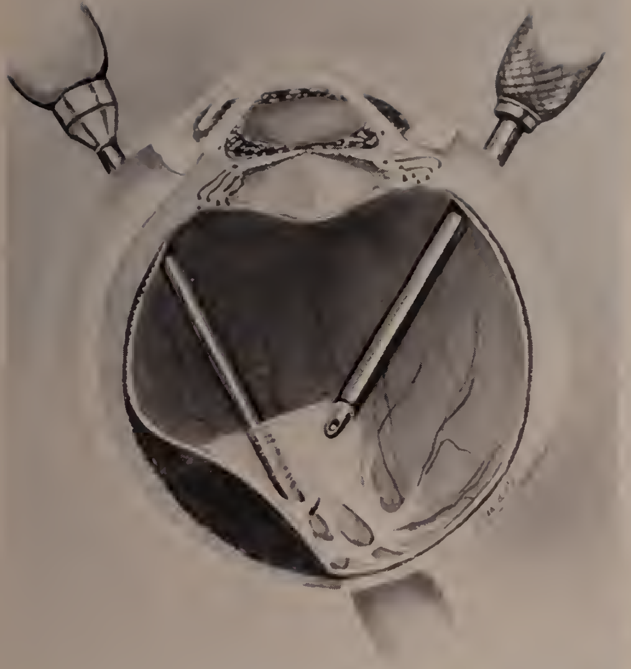


FIGURE 8. Artist's representation of membrane peeling.

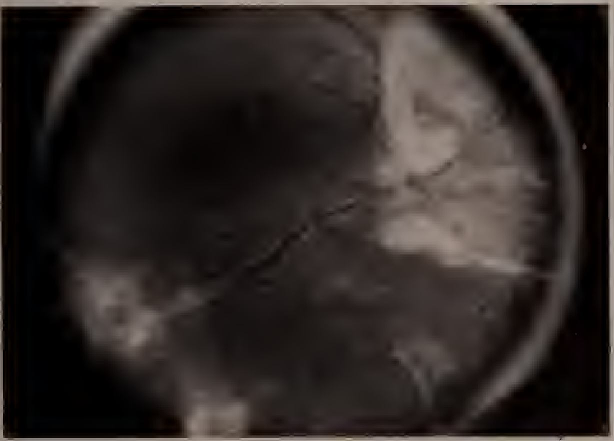


FIGURE 9. Postoperative result of anatomic reattachment in a diabetic traction detachment.

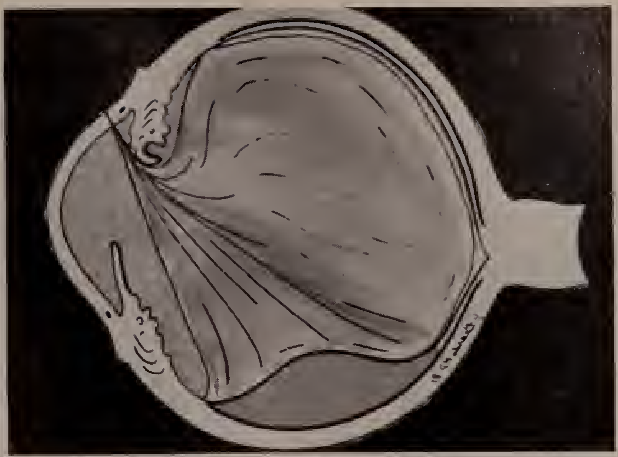


FIGURE 10. Artist's representation of a traction detachment resulting from vitreous incarceration at the time of cataract extraction.

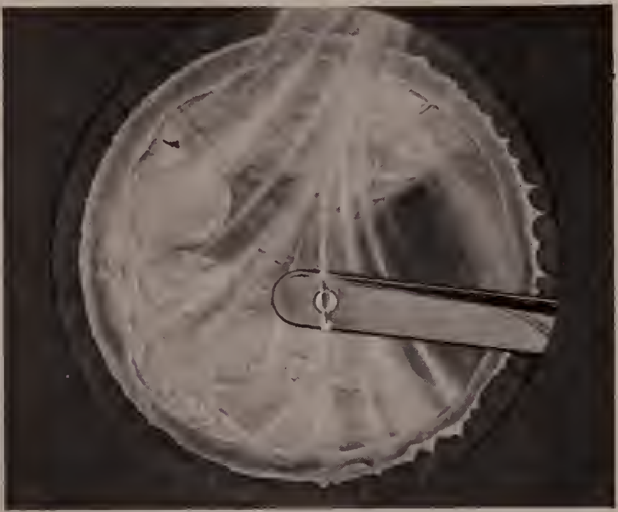


FIGURE 11. Traction and rhegmatogenous retinal detachment resulting from vitreous incarceration at the time of cataract surgery.

years;[1,2] (2) there is a high ocular morbidity associated with vitrectomy procedures in the diabetic population[3]; and (3) there are significant risks involved with the use of anesthesia in this population.[1]

When vitrectomy is necessary, the following principles are generally applied: (1) All anterior-posterior vitreous traction is removed, leaving clear lenses undisturbed; (2) tangential traction is then removed, utilizing the various techniques of membrane peeling, membrane stripping, and segmentation of surface fibrovascular proliferation (Fig 8); (3) posterior retinal breaks created during this procedure are treated at the time of vitrectomy with either external cryotherapy or internal techniques of photocoagulation or endodiathermy; (4) internal drainage of subretinal fluid followed by a complate air fluid exchange is performed; and (5) peripheral retinal breaks created during surgery are treated by standard scleral buckling.

Figure 9 illustrates the case of a 30-year-old juvenile diabetic whose vision suddenly was reduced from the 20/60 to the 20/400 level when a traction detachment of the inferotemporal arcade involved the macula. Vitrectomy techniques as described in the preceding paragraph were utilized, and complete anatomic reattachment was possible. The vision improved to the 20/80 level. Table I shows the largest series of diabetic macular traction detachments to be reported in the past year. Significant visual improvement in both series indicates at least two lines.

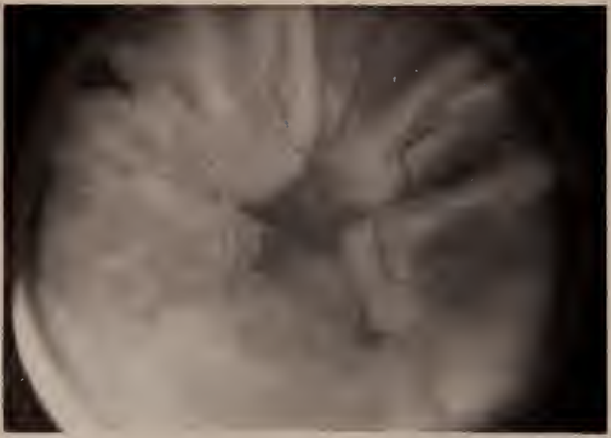


FIGURE 12. Massive periretinal proliferation.

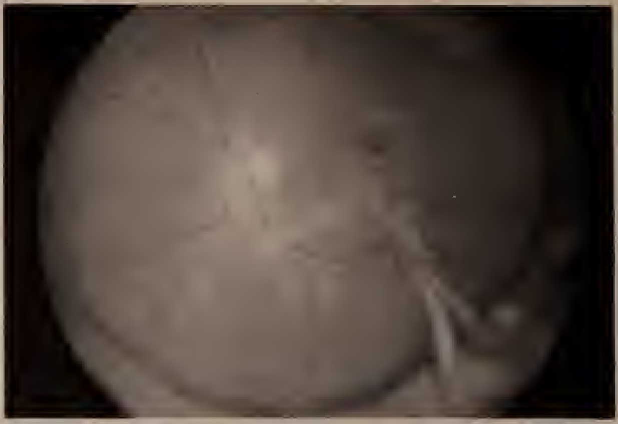


FIGURE 13. Surgical result in case illustrated in Figure 12 following vitrectomy techniques.

Other less common causes of traction retinal detachment include cataract surgery and uveitis. Figure 10 shows an aphakic eye in which vitreous loss at the time of cataract surgery was not managed properly and a traction detachment of the retina resulted. Here, also, vitrectomy was necessary to remove the anterior-posterior traction prior to standard scleral buckling. Figure 11 represents such a case, in which both a traction and a rhegmatogenous detachment occurred in an aphakic eye. The ultimate prognosis for these eyes is favorable.

Massive periretinal proliferation

Massive periretinal proliferation (MPP) is the chief cause of failure in retinal detachment surgery today; it occurs following retinal surgery in approximately 4% to 6% of eyes.[4] The retina is thrown into rigid fixed folds, with both radial and circumferential orientation secondary to a proliferation of both fibrous and glial tissue on and under the retinal surface. Retinal pigment epithelial cells, retinal glial elements, and vitreous hyalocytes have all been implicated in this proliferative process.[5] It is possible to achieve anatomic reattachment in these cases only by utilizing vitrectomy techniques combined with scleral buckling revision. Figure 12 shows an eye from a 45-year-old Hispanic male who had a total retinal detachment, which the author repaired approximately one month prior to this photograph. A two-instrument vitrectomy technique was utilized with complete removal of vitreous gel combined with membrane peeling. When retinal mobilization was achieved, a scleral buckle revision, coupled with a complete air fluid gas exchange, was utilized. Figure 13 shows this patient's eye two months following surgery.

Table II indicates Dr. Machemer's recent clinical experience with this disease process. Perhaps the use of intraocular steroids or the use of silicone oil may improve these anatomic results.

TABLE I. Traction Detachment of Macula* PDR

S. Charles, M.D.:	444 Eyes 84% Reattached 65% Visual improvement
T. Aarberg, M.D.:	125 Eyes 70% Visual improvement

* Advanced Vitrectomy Course, Duke University, April 11, 12, 1981.

TABLE II. Massive Periretinal Proliferation*

R. Machemer, M.D.:	41 Eyes	
	Anatomic Attachment	
	61%	1 wk
	37%	6 mo
	34%	18–30 mo

* Advanced Vitrectomy Course, Duke University, April 11, 12, 1981.

Conclusion

Vitrectomy instrumentation and techniques have been with us for approximately a decade. Their refinement and improvement should allow the ophthalmic surgeon to achieve greater capability in the management of difficult anterior and posterior segment problems.

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Acknowledgment. I wish to thank Dr. Judith A. Beards for the illustrations, The Retina Associates (Boston) for Figures 7 left and 11, Mr. Michael Sobel for the fundus photographs, and Nancy Scudiere for secretarial assistance.

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The Physician's Sleep Glossary

Some common sleep laboratory terms

poly•som•no•graph. An instrument which simultaneously records by electrodes physiological variables during sleep—for example, brain activity (EEG), eye movements (EOG), muscle tonus (EMG) and other electrophysiological variables. These readings indicate precisely when patients fall asleep, how many wake periods they experience, the quality of sleep and the duration of sleep.

sleep la•ten•cy. The period of time measured from "lights out," or bedtime, to the commencement or onset of sleep.

wake time af•ter sleep on•set. Intervals of time spent awake between onset of sleep and the end of the sleep period. The polysomnograph registers the length and frequency of the intervals.

to•tal sleep time. The amount of time actually spent in sleeping. This is estimated by subtracting wake times from the period encompassed by the onset and the termination of sleep.[1]

REM/NREM. 1. REM, or rapid eye movement, sleep is "active"—characterized by increased metabolic rates, elevated temperature and arousal-type EEG patterns. 2. NREM, or non-rapid eye movement, sleep represents "quiet" sleep stages. There are four distinct stages of NREM sleep.[2]

re•bound in•som•nia. A statistically significant worsening of sleep compared to baseline on the nights immediately following discontinuation of sleep medication.[3]

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Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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(*CME Sampler continued from page 289*)

tion of an entire profession too much under commercial, non-university influence," must be recognized and dealt with. I therefore believe that this, the largest and the least-regulated aspect of CME, should be given attention.—**Norman M. Kaplan.** The Support of Continuing Medical Education by Pharmaceutical Companies. *N Engl J Med* 1979; 300:194.

Future CME must consider adult learning methods. The process of identifying learner needs is underdeveloped, with medical audit and formal testing the two best known, but least used, methods. Additional work is needed to identify societal demands on physicians, identifying the collaborative role of other health professionals, and research into how practicing physicians learn. This investigation can have profound implications for educational systems. The formal lecture may be replaced wholly or partially by self-study programs, small group discussions, or computer-assisted instruction. All of these changes must be evaluated against the practice of medicine, and mere cataloging of hours of attendance or physician attitudes should have lesser importance. The traditional forms of CME may still have an important role in the overall education of the physician, but they must be planned with the actual needs of the learner group in mind and must use adult learning methods.

Although it is not possible to state that laws mandating CME participation have had any direct effect on improving the quality of care, they have been instrumental in initiating educational activities in community hospitals. The laws have also been useful in pointing out the underdeveloped nature of the CME system. There is, however, no evidence that the behavior of physicians has been changed or that delivery and evaluation of CME programs has changed. The task of developing CME and linking it to improved and more cost-efficient patient care demands greater interest and activity.—**Jeoffrey K. Stross, William R. Harlan.** The Impact of Mandatory Continuing Medical Education. *JAMA* 1978; 239:2666.

The study covered three groups of New York County physicians: those practicing in shared health facilities (SHF) and who were thought not be affiliated with hospitals or medical societies, and, therefore, were outside the mainstream of medicine; a sample of academicians affiliated with the four medical schools in the country; and a sample of generalists and specialists in active practice.

The objectives of the study were (a) to determine the time spent on CME activities by members of each study group; (b) to determine whether formal CME program offerings met the perceived needs of the members of the physician groups and to what extent

(*CME Sampler continued on page 344*)

Sexually Transmitted Diseases and Child Sexual Abuse

Part 1

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Sexually transmitted diseases (STDs) in children are most often the result of sexual abuse. Sexual abuse exposes dependent, developmentally immature children and adolescents to sexual stimulation inappropriate for the child's age, level of psychosexual development, and role in the family.[1-3] The sexual activity is initiated and sustained by an adult or an older peer with pressure, threats, or promises of reward. The adult routinely elicits the child's promise to remain silent about the sexual activity.[4] Since physical trauma may be absent or inapparent,[5-8] a gonococcal infection represents accidental disclosure of current sexual abuse.[9] STDs and child sexual abuse is presented as a two-part series. Part I is devoted to the epidemiology and diagnosis of child sexual abuse. The next issue of the Sexually Transmitted Diseases column will continue a discussion of sexual abuse in children with a focus on medical management.

Epidemiology

How can one account for the increasing incidence of gonorrhea reported in the 0 to 10-year group? (Table I). While the medical community seldom views the world through rose colored glasses, the area of sexually transmitted diseases in children has long been out of focus. Bedsheets and toilet seats do not transmit syphilis and gonorrhea in the adult population, yet they are often blamed as the source of pediatric infections.[10,11] Nonvenereal transmission of syphilis and gonorrhea is rare. The epidemiologic double standard stems from clinician discomfort in admitting that often children are abused sexually. When the medical profession maintains the illusion that youngsters are sexually inactive and therefore not at risk, infections acquired via sexual abuse remain undetected and untreated. Further, epidemiologic follow-up is readily dismissed in the "sexually inactive" child in spite of the presence of laboratory-confirmed gonococcal infection, thus impairing proper diagnosis and treatment.[1]

When an infection is correctly recognized as sexually acquired, the belief that invariably the source of infection is an age-appropriate peer conveniently masks cases of child sexual abuse. While it has been shown that 90% of children in the 10- to 14-year age group acquire gonorrhea by sexual contact with infected peers,[12] molestation by relatives accounts for most infections in children under nine.[13]

Since only a fraction of sexual abuse cases are reported at the time of occurrence, the true extent of child sexual abuse is unknown. One estimate suggests 3,000 cases of child sexual abuse annually in New York City alone.[14] Gonococcal infection reveals only a small percentage of child sexual abuse cases. In 1980, New York City reported 92 cases of gonorrhea in children under 10 (Table II).[15] With the exception of neonatal gonococcal conjunctivitis developing shortly after delivery from an infected mother, all gonococcal infections in the 1- to-9-year age group should be considered sexually transmitted,[16] and strongly suggestive of child sexual abuse.

Risk factors

When an adult known to the child engages the child sexually, the adult generally takes advantage of an authority position. An adolescent perpetrator will frequently be responsible for babysitting younger siblings, nieces, and nephews and utilizes the authority of the role to force or pressure sexual activity. In poorly supervised crowded households there is a strong probability that sexual exploration between peers will occur in the presence of younger children and then extend to them.[9] By virtue of the younger

Table I Gonococcal Infection in Children 0–9, United States

Year	Male	Female
1960*	350	1,272
1975†	781	1,999
1976†	738	1,970
1977*	709	1,803
1978*	727	2,073
1979*	890	2,194

* US Dept of Health and Human Services: *STD Fact Sheet, ed 35.* HHS Publication No (CDC) 81-8195.
† US Dept of Health, Education, and Welfare: *STD Fact Sheet, ed 34.* HEW Publication No (CDC) 79-8195.

TABLE II. Reported Gonococcal Infection in Children 0–10, New York City, 1980*

Reporting Source	Males	Females	Total
Bureau of VD Control	8	4	12
Private physicians	2	11	13
Other	26	41	67
Totals	36	56	92

* New York City Department of Health Bureau of Venereal Disease Control, Statistical Division.

child's subordinate position, there can be no actual consent to the sexual activity.

In violent sexual assaults on children, acquaintance with the rapist occurred in from 63% to 82.5% of cases,[6,7,17] with half the rapes committed by relatives.[7] In contrast, father-daughter incest tends to lack violence, although there may be a striking relationship between physical abuse and sexual exploitation.[3] Violence and alcoholism is common among men who sexually abuse their sons.[18]

The incestuous family frequently is thought to consist of a domineering patriarchal father and a passive, ineffectual mother who pushes the daughter into a central female role.[6,19] Risk of incest increases when the mother is chronically depressed. Family dynamics reveal an inadequate parental sexual relationship in a majority of cases.[6] Avoidance of sex may be a well-established pattern which raises little conflict. Mothers are often unconsciously aware of the sexual abuse of the child, if not consciously aware of the fact, and help perpetuate it through denial, passivity, and failure to provide the child adequate protection.[2]

While more attention is directed toward the male abuser and the female child victim, mothers do overstimulate male children, especially when the father is absent from the family.[2] Although it is diffult to conceptualize a mother as less than a nurturing figure, women who regularly sleep with and sexually stimulate their school-age sons cannot be viewed as anything but abusive. Bed-sharing between parent and child should be regarded as a predisposing condition for incest.[20]

There is no relationship between incest and economic class. It is safe to say that families utilizing public sources of health care are more likely to be included in statistical data, and that such data may overrepresent the economically disadvantaged. The Child Abuse Treatment Center of Denver reports attendance by youngsters of professional, white- and blue-collar workers, and the poor, which reflects a true cross-section of the community.[3] It is particularly difficult for medical professionals to acknowledge the occurrence of sexual abuse in middle-class and upper-class families,[2] which discourage recognition of the phenomena in these groups.

Many children who experience incest have some special condition, such as deafness, retardation, or seizures, which renders them additionally vulnerable to incest.[21] As a manifestation of family pathology,[2,6,22] incest may be one of many severe disturbances of the multiproblem family.[19] Highly dysfunctional families are therefore at greater risk of incest.

Signs and symptoms

The child may first come to medical attention after some crisis situation,[3] but this is seldom the rule. The sexually abused child can be recognized by both physical and behavioral symptoms. Adult and adolescent victims of rape display increased phobias, insomnia, depression, psychosomatic complaints, increased alcohol consumption, and suicidal behavior.[23] Child victims of violent sexual assault exhibit less behavioral changes than their adult counterparts,[24] but in a group studied, 31% had sleeping difficulties, 20% had nightmares and cried out, 25% wanted to relocate, 20% ate less, and 11% did not feel safe.[24] The term "rape trauma syndrome" has been coined for the pattern of phobia, denial, and psychosomatic complaints following sexual assault.[25,26] This syndrome also occurs in the child victim of sexual assault. Older children may appear with enuresis, hyperactivity, altered sleep patterns, dizzy spells, abdominal pain, compulsive masturbation, or precocious sexual play.[10,19,23] Encopresis was reported in one child and was thought to be related to her father's attempt at rectal intercourse.[19] Preverbal children are most likely to have generalized physical and behavioral symptoms, such as eating and sleeping disturbances, increased fearfulness, altered activity level, or dysuria.[2] Toddlers and school-aged children are generally reluctant to verbalize the source of their fears.[1] Incestuous relationships span many years and become a particularly intolerable situation during adolescence. To stop the family abuse pattern, teenagers may run away from home[3] or attempt suicide.[17,18]

Diagnosis

The recognition of sexual abuse is dependent on physician willingness to consider the possibility.[1] Retrospective chart reviews will frequently reveal child abuse. Young patients appearing with the major complaint of rape, incest, or molestation are easy to identify as victims of sexual abuse. Indicators that may point to sexual abuse include adolescent pregnancy, unexplained vaginal bleeding, recurrent vaginitis, anogenital trauma or irritation, unexplained genital pain or dysuria, or undue parental concern with the condition of the child's anogenital region.[2,22] Utilizing these criteria, a 1975 retrospective analysis of medical charts from a Rochester, New York hospital revealed 39 cases of child sexual abuse.[22] Although physical examination and laboratory tests were appropriate, social and medical histories were lacking. Similarly at Boston's Children's Hospital, in 1973, 52 such cases were detected. The diagnosis of sexual abuse was not considered in at least 25% of these cases[2] due in part to a failure to elicit relevant social, familial, and behavioral data. It is imperative to include child sexual abuse in the differential diagnosis of infants with reddened or traumatized genitalia,[1,2] as the sign is indicative of excessive manipulation of the baby's genitals. Genital irritation, laceration, abrasion, or infection should always raise questions. Frequently a history of some accidental trauma is given, such as a bathtub fall, but is insufficient to explain the physical findings. While urinary tract infections are commonly seen in childhood, especially in girls, examiners too readily assume that some agent, such as bubble bath, is the cause of the irritation. Sexual abuse should be considered as a possible cause.

Other indicators that should arouse suspicion of sexual abuse are generalized child abuse signs (burns, bruises, fractures), lesions around the mouth and perineum, painful urination or defecation, or the presence of STDs.[8]

Many child victims of sexual abuse lack external evidence of trauma, particularly when contact is limited to nontraumatic sexual practices such as fondling, fellatio, and cunnilingus. Frequently, the adult will masturbate againt the child's perineum, chest, or abdomen without attempting forcible penetration of vaginal or rectal orifices. Gonococci-laden ejaculate may thus produce urethral, rectal, or vaginal gonorrhea infections.[5,9] On the other hand, a skilled child abuser can accomplish penetration without producing trauma, thereby directly infecting the victim.

Because children are subjected to the same array of sexual activity that adults engage in, it is essential to always culture oral, rectal, and genital sites. Contact investigation of symptomatic children reveals other infected individuals who are both children and adults[9]; thus it is recommended that cultures be performed on all household and playgroup members as well. It has been noted that adults who refuse to assent to examination and culture, or who procrastinate unduly, either have had a previous gonococcal infection or currently seek treatment for an existing infection.[9] In a study of 45 children under 9 years with gonorrhea, a history of sexual contact with relatives within the household was obtained in all but one case.[13] In a group of 73 children under 10 years with gonorrhea, 55 had relatives, associates, or sexual contacts with positive gonococcal cultures.[16]

Conclusion

Although hard data on the incidence of child sexual abuse are unavailable, it is clear that the number of cases is greater than expected by many health professionals. The sexual abuse of children cuts across economic and social classes as well as family relationships. Children made additionally vulnerable by some special condition or impediment are at increased risk of victimization. As overt physical manifestations of sexual abuse are often absent, behavioral symptoms are of particular importance in diagnosis. With the exception of gonococcal ophthalmia, the presence of any STD in a child in the 1- to 9-year age group is indicative of sexual abuse unless proved otherwise.

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Acknowledgment. The authors gratefully acknowledge the advice given by Suzanne Sgroi, M.D., in the preparation of this paper.

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revision was needed; (c) to determine how physicians evaluated formal CME courses and why they participated in such courses and to identify impediments to participation; and (d) to determine attitudes and opinions about the relationship of CME to relicensure and recertification.

This survey provided the following conclusion:

(1) Reading professional books and journals was by far the most important CME activity to all three groups of physicians.

(2) All physicians spent some time reading unsolicited materials, though they valued them less than professional books and journals. Unsolicited materials and audiovisual materials were more useful to the SHF physicians than others; peer review activities were less useful to the SHF physicians than to others.

(3) All groups spent several days, perhaps as much as two weeks a year, attending various professional meetings, but in spite of the time spent they were not evaluated as very useful in terms of CME.

(4) Members of all groups spent several days per year at formal postgraduate courses.

(5) Postgraduate courses received high ratings from all groups, especially the SHF physicians: four out of five SHF physicians found them very useful. However, in spite of a good overall rating, only 38% of the SHF physicians felt that formal CME courses "substantially" met their needs.

(6) Expansion of general knowledge was the most important reason for participating in CME; improvement of quality of care and preparation for relicensure or recertification were relatively unimportant reasons.

(7) Major impediments to CME participation were time away from practice, time away from home, expense, loss of income, and inability to coordinate CME course availability with physicians' schedules. Relevance, quality, and organization of CME courses were not major impediments to participation.

(8) Physicians in all groups believed that state relicensure was not desirable. If required, though, about two-fifths favored partial usage of CME credit hours, review of records and patient management, review by a department committee or chief, or peer review. Very few favored examinations. There were similar feelings concerning recertification.

—ELEANORE ROTHENBERG, MICHAEL WOLK, STEPHEN SCHEIDT, et al. Continuing medical education in New York County: physician attitudes and practices. *J Med Educ* 1982; 57:541–49.

An expected consequence of the PRA (Physician's Recognition Award) program was to "stimulate the market" for production of appropriate and convenient educational programs that would allow physicians to adapt their educational program to the constraints of their practices and their life-styles.

(*CME Sampler continued on page 360*)

BRIEF SUMMARY
PROCARDIA® CAPSULES For Oral Use
(nifedipine)

INDICATIONS AND USAGE: I. Vasospastic Angina: PROCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria: 1) classical pattern of angina at rest accompanied by ST segment elevation, 2) angina or coronary artery spasm provoked by ergonovine, or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography, the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PROCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e.g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm, or when angina is refractory to nitrates and/or adequate doses of beta blockers.

II. Chronic Stable Angina (Classical Effort-Associated Angina): PROCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or organic nitrates or who cannot tolerate those agents.

In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in those patients are incomplete.

Controlled studies in small numbers of patients suggest concomitant use of PROCARDIA and beta blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs. (See Warnings.)

CONTRAINDICATIONS: Known hypersensitivity reaction to PROCARDIA.

WARNINGS: Excessive Hypotension: Although in most patients, the hypotensive effect of PROCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension. These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers

Severe hypotension and/or increased fluid volume requirements have been reported in patients receiving PROCARDIA together with a beta blocking agent who underwent coronary artery bypass surgery using high dose fentanyl anesthesia The interaction with high dose fentanyl appears to be due to the combination of PROCARDIA and a beta blocker, but the possibility that it may occur with PROCARDIA alone, with low doses of fentanyl, in other surgical procedures, or with other narcotic analgesics cannot be ruled out.

Increased Angina: Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PROCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Beta Blocker Withdrawal: Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines Initiation of PROCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PROCARDIA initiation. It is important to taper beta blockers if possible, rather than stopping them abruptly before beginning PROCARDIA.

Congestive Heart Failure: Rarely, patients, usually receiving a beta blocker, have developed heart failure after beginning PROCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event.

PRECAUTIONS: General: Hypotension: Because PROCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PROCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. (See Warnings.)

Peripheral edema: Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PROCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Drug interactions: Beta-adrenergic blocking agents: (See Indications and Warnings.) Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PROCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina.

Long-acting nitrates: PROCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Digitalis: Administration of PROCARDIA with digoxin increased digoxin levels in nine of twelve normal volunteers The average increase was 45%. Another investigator found no increase in digoxin levels in thirteen patients with coronary artery disease In an uncontrolled study of over two hundred patients with congestive heart failure during which digoxin blood levels were not measured, digitalis toxicity was not observed Since there have been isolated reports of patients with elevated digoxin levels, it is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing PROCARDIA to avoid possible over- or under-digitalization.

Carcinogenesis, mutagenesis, impairment of fertility: When given to rats prior to mating, nifedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose.

Pregnancy: Category C. Please see full prescribing information with reference to teratogenicity in rats, embryotoxicity in rats, mice and rabbits, and abnormalities in monkeys.

ADVERSE REACTIONS: The most common adverse events include dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%. Syncopal episodes did not recur with reduction in the dose of PROCARDIA or concomitant antianginal medication. Additionally, the following have been reported: muscle cramps, nervousness, dyspnea, nasal and chest congestion, diarrhea, constipation, inflammation, joint stiffness, shakiness, sleep disturbances, blurred vision, difficulties in balance, dermatitis, pruritus, urticaria, fever, sweating, chills, and sexual difficulties. Very rarely, introduction of PROCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related. Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

Laboratory Tests: Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CPK, LDH, SGOT, and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nifedipine therapy The relationship to PROCARDIA therapy is uncertain. These laboratory abnormalities have rarely been associated with clinical symptoms. Cholestasis, possibly due to PROCARDIA therapy, has been reported twice in the extensive world literature

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Please see PROCARDIA *brief summary on adjoining page.*

Medical • Legal Observations

Donald R. Moy, J.D., Consulting Editor

Workers' Compensation Medicine

Psychiatric evaluation

JOSEPH DEUEL SULLIVAN, M.D.
New York City

Associate Professor, Clinical Psychiatry, Cornell University Medical College; Associate Attending Psychiatrist, New York Hospital; and Attending Psychiatrist, Cabrini Medical Center and St. Vincent's Hospital

> *The Workers' Compensation Board has designated you . . . to review the record, examine the claimant and render an opinion as to whether the claimant has a psychiatric condition causally related to the accident of record; and, if so, to what degree does this disable the claimant? . . . .*

This quotation is from a letter by the director of health provider practices to an impartial psychiatric examiner which accompanies a New York State Workers' Compensation Board file. This record is likely to be voluminous in some cases and may contain the opinions and testimony of psychiatrists for the defense and for the claimant.

It is my custom to study this record and to abstract from it all matters that I consider to be of psychiatric relevance, along with information about the injury itself and subsequent medical and surgical developments.

I examine the patient, with an interpreter if necessary. I then review the whole matter and come to conclusions that assist me in answering the necessary questions.

Impartial specialist

For a number of years I have been an impartial specialist in psychiatry with the State of New York Workers' Compensation Board. In this position I forego my privilege to treat patients who are covered under Workers' Compensation. I give psychiatric opinions on claimants, about whom there is some psychiatric dispute. The main factors of interest are (1) a determination of the extent to which the individual is psychiatrically disabled, and (2) whether or not this disability is causally related to the accident of record; that is, does the disability grow out of the injury, or other job exposure? I may be called on to testify should either the claimant or the employer wish amplification of my written findings or to challenge them in one way or another. In prior years I have examined both for the defense and for the claimant and testified in those capacities. As an impartial psychiatrist, I no longer have the opportunity to accept commissions of service from either employers or claimants.

I shall sketch out, in part, my own views with regard to Workers' Compensation, thereby perhaps exposing my own limitations and subjectivity.

Coverage

Almost all workers are insured today against injury and loss of earnings. In New York State about one third of these workers are covered by private carriers, another third by the State Insurance Fund, and the remainder by self-insured employers; this is a no-fault type of insurance. Blame or responsibility for the accident is not an issue. It was historically necessary to develop such a system if injured workers were to be cared for and to be compensated for their loss of income. Prior to this systsem, an injured workman might have lost his employment and been thrown on public charity. He might have brought suit against his employer, but the odds were often against him. Some socially minded employers gave support to their injured workers. Less generous employers might have said, "The accident was the worker's fault, not mine," or "It was the other worker's fault and I shouldn't be penalized."

Workers' Compensation laws and regulations have been developed toward reasonable standards of benefits and toward individualized medical care. Generally the worker has sacrificed his common law right to sue against his employer in the process. He may still have the option of bringing legal action against a third party. For instance, a painter in a hotel might become injured by a fall from a ladder. His employer, a painting contractor, has provided Workers' Compensation coverage and may not be sued by the painter. The painter may, however, bring third-party action against the hotel under the common law. In this connection I might say that protraction of disability and psychiatric claims are sometimes enhanced by third-party actions.

Claims

There have been recent legal and economic developments whereby some injured workers try to avoid allegedly inadequate compensation awards to claim larger tort damages. Professor Davis[1] of the University of Connecticut Law School recently made a presentation of some of the legal strategems involved. He quoted Judge Oliver Wendel Holmes, *The Common Law* 37-38(1881), where his chapter on "Early Forms of Liability" concludes:

> My aim and purpose have been to show that the various forms of liability known to modern law spring from the common ground of revenge. In the sphere of contract the fact will hardly be material outside the cases which have been stated in this lecture. But in the criminal law and the law of torts it is of the first importance. It shows that they have started from a moral basis, from the thought that some one was to blame.
>
> It remains to be proved that, while the terminology of morals is still retained, and while the law does still and always, in a certain sense, measure legal liability by moral standards, it nevertheless, by the very necessity of its nature, is continually transmuting those moral standards into external or objective ones, from which the actual guilt of the party concerned is wholly eliminated.

Establishing disability

The whole concept of compensation to workers for injuries is a noble and good one, but in this package there is included a neurotic boomerang. If you compensate people for being disabled, you should expect that some of them will react by trying, consciously or not, to get as much as they can by this gain from illness.

The 50-year-old worker whose back has been bothering him for a long time because of osteoarthritis, and who sustains a relatively minor back injury, may be very ripe for the production of psychologic invalidism. Sometimes a mentally ill person may decompensate on the job and a question arises, "To what extent was his mental illness caused by the accident, or even by job stress?"

The majority of patients seen in Workers' Compensation are those who have sustained an accident on the job. Many psychiatric disabilities and claims are those that are related to primary injury to the head, neck, back, hand, or other extremity.

The deliberate feigning of physical or mental symptoms after an injury does occur, but perhaps less frequently in pure form than some suspect.[2] It is here that minimization of bias on the part of the examiner is most important. The fact is that many injured workers deliberately exaggerate their complaints. Unfortunately, the habit of disability sets in quickly and litigation is a slow process. Most people who develop the habit of pain or disability soon lose the ability to revert to good functioning. They usually become self-deceivers and psychologic invalids— "Is the patient faking, Doctor?" The answer is often, "Yes, he is faking some, but his disability is now only partially voluntary or conscious and to a considerable extent his psychologic disability is involuntary or not under conscious control."

There is, of course, a difference between psychiatric illness and disability. Many people are mentally ill and are able to function. There is no entirely satisfactory disability handbook. The Social Security rules for determining disability are simple and workable, but not really satisfying to a psychiatrist.[3] Using this classification, chronic brain syndrome and functional nonpsychotic disorder constitute most of the Workers' Compensation psychiatric claims. Functional psychotic disorders, that is, disorders of mood, schizophrenia, and paranoid states, along with mental retardation, are less frequently encountered. The big difference between Social Security and Workers' Compensation claims for disability is that Social Security is concerned simply with disability, and Workers' Compensation is concerned with causality as well.

Being an impartial psychiatrist is gratifying. I study the case after an evaluation, give an opinion with regard to causality at hearings, and then answer the adversary attorneys' questions truthfully and carefully. I do not make it my business to figure out why they ask what they do. I respond honestly to their questions even if my answers may appear to be inconsistent with the opinion I have given. It may be up to opposing counsel to bring out what I really mean as far as the law is concerned.

Impartiality

Are impartial specialists really impartial?[4] In the psychiatric literature on law there was once a famous editorial on the subject: Does not the impartial specialist become involved with his opinion? Is he not on an ego trip? Can he afford to let the weaknesses in his formulation be seen? If he is a political liberal will he not identify with the worker, and if he is a reactionary might he not favor the employer or carrier? I think there is some virtue to these questions. Fortunately, such forces are less at work in Workers' Compensation than in criminal law, which may be spectacular as well as headlined.

Litigation

The defense psychiatrist[5] faces several special features of litigation in Workers' Compensation:

1. Patients lose legal advantages by becoming well.
2. The expert witness often was not treating the patient.
3. Although the burden of proof is technically on the claimant, it may actually fall on the defense

in psychiatric cases because such injury is readily claimed while its absence may be difficult to prove.

4. If the defense is denying physical disability, an alternative explanation is that psychiatric disability explains his complaint.
5. A trial of treatment may be helpful but attorneys may hold that financing treatment is an admission of guilt.
6. Return to the job may be therapeutic, but there may be legal reasons why the not-yet-healed worker should not return to work.
7. Attorneys may not want the claimant's relatives interviewed.

The adversary system seems to require that each side must present facts in a manner most favorable to its respective clients. Patients who have strong tendencies to restore themselves mentally may come into conflict with their attorneys. There are other difficulties encountered by the claimant's psychiatrist.[6] Many good treating psychiatrists have a reluctance to testify.

The psychiatrist who is called on by the claimant's attorney may feel that he is asked to "legitimize" the patient's subjective distress. The major postaccident events that increase the patient's anxiety and magnify his disability are the litigation and compensation factors. In my opinion, litigation is disadvantageous to the psychiatric status of most claimants.

Reference resource

There is an important review source[7] for attorneys on psychiatric disabilities and claims; it covers such topics as consideration of back injuries, depressive reaction, anxiety with phobic symptoms, neurasthenic reactions with fatigue, irritability and sensitivity to noise, conversion hysteria, and, most important of all, a variety of somatic complaints that may become the subject of anxious introspection and hypochondriac concern.

A recent study indicates that it may be possible to identify those who are likely to develop psychotraumatic reactions.[8] Irritability is the most common early sign, and this, or other indications of psychologic stress, show in the period from two weeks to two months after the injury. Possibly earlier psychiatric intervention in such cases will be helpful.

The subject of "functional overlay,"[9] which is much used in Workers' Compensation, has never been officially accepted in psychiatric nomenclature. Nonetheless, it has recently achieved the dignity of some legitimization by Bromberg,[9] who places it between malingering and hysteria. It arises from dependency, anxiety, resentment, and faintly paranoid attitudes toward society in persons involved in accidents. In the *Diagnostic and Statistic Manual (DSM)-III*, the Diagnostic Formulation: "Psychological Factors Affecting Physical Condition" (316.00) may apply to this category.

Leedy et al[10] edited a volume on compensation in 1971. There is no later edition of this politically liberal book, written more than a decade ago when there was a great deal more optimism than there is now about further financing for the mentally ill. This collection of essays is not primarily directed toward Workers' Compensation, but rather toward help for those who have psychiatric disabilities generally. There are several chapters, however, which either directly or indirectly are concerned with Workers' Compensation.

Physician's function

The physician gives an opinion about disability and causality which is helpful in judicial determination. Part of the physician's advisory function may be to clarify medical language for the legal profession which seems endlessly fascinated and confused by psychiatric terminology.[11] The concept of secondary gain is that the injured party may achieve not only monetary disability benefits and lost earnings, but is released from ordinary responsibility and given care and unusual services. This is to be distinguished from malingering, which is deliberate and fraudulent simulation or exaggeration. Primary gain is the neurotic use of defense mechanisms, such as conversion or projection, to obtain relief from anxiety.

Legal admiration for medical diagnostic precision arises partly from the joys of advocative challenge. There is great interest in handbooks of disease. *DSM-III*[12] will acquire, I think, a quasi-legal status. One judge recently prevailed on me to request the chairman of the Workers' Compensation Board to make the manual more freely available at hearings.

When the physician speaks of causality he thinks etiologically, and I believe it is important that he hold onto this even though the laymen and attorneys have other concepts. For example, physical trauma is not a cause of schizophrenia, but courts may conclude that cause is legally present if injury is coincident with emergency of psychiatric disorder. On the other hand, the courts may be very loathe to see that a mentally deficient individual who has been working in a marginal situation can become completely disabled after incurring only a minor new handicap.

It is my personal opinion that psychotherapy is not as promising in injury cases as are more general rehabilitative efforts with psychiatric input.

Summary

New York's Workers' Compensation laws were enacted in 1914, setting up a no-fault system of standardized benefits and individualized medical treatment for injured and disabled workers. There is emerging lately an increase in psychologic invalidism which requires our heightened professional interest.

440 East 23 Street
New York, New York 10010

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IN PATIENTS PRONE TO NONALLERGIC BRONCHOSPASM (*e g* , CHRONIC BRONCHITIS, EMPHYSEMA), administer with caution since propranolol may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta-receptors

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Allocation of Scarce Medical Resources

The Jewish view

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This article attempts to illustrate some of the current ethical dilemmas in the allocation of limited medical resources and discusses some of the present practices used to cope with these dilemmas. The propriety and feasibility of legislative solutions to the problem of scarce medical resource allocation is discussed elsewhere.[1] The thrust of this essay is to focus on the ethical and moral issues with emphasis on the Jewish viewpoint.

Let me define the problem. A private or voluntary hospital has no duty to furnish its services to everyone. However, if it opens an emergency room, it obligates itself to provide emergency care to the community. A physician is not required to provide resources not generally available. However, he must, provide a level of care consonant with standard medical practice of good quality. At present, hospitals and physicians make most of the decisions in the allocation of their resources, although neither is often totally happy with that responsibility. Limited funds may not allow the hospital to buy both additional respirators and additional dialysis machines or new defibrillators. The hospital must then decide what to buy or replace. A physician with a limited supply of a new drug must decide which patient will receive it and to which patient it will be denied. Should a group of laymen be given the decision-making power to relieve the hospital and physicians of the ethical problems? How would such a group of laymen decide? What criteria would they use? Should lawyers, legislators, and judges assume the role of allocating scarce medical resources and determine hierarchies of criteria for the distribution and allocation of such resources?

Let us examine hemodialysis to illustrate the ethical issues involved in a classic situation involving the allocation of scarce medical resources. In 1973, the United States Congress legislated that all patients with kidney failure who need hemodialysis or kidney transplantation should have access thereto and that Medicare would assume the cost for the entire End Stage Renal Program. Prior to 1973, allocation decisions were made in a two-step process. First, rules of exclusion were applied to narrow the number of potential treatment recipients. Second, rules of selection were applied to choose between the remaining applicants.[1] Some factors such as age may be invoked in both the exclusion and selection process.

Hemodialysis—exclusion and selection

Factors of exclusion may include: (1) patient desires—inability or unwillingness to travel to a distant location for treatment or preference for a particular physician or hospital, (2) hospital function and orientation—veterans' hospitals which only service veterans and only for service-related disabilities, (3) age—exclusion of patients below ten or above 60 years of age, (4) treatment requirements—the need to come to the hospital several times a week for hemodialysis or the need for running water and electricity for home dialysis, (5) psychosocial requirements—psychologic stability, intelligence, and cooperation of the patient and stability of the family, (6) medical criteria—the relative contraindication of hemodialysis for diabetics and patients with certain other disorders, (7) maximum utilization requirements—the exclusion from an acute hemodialysis program of patients requiring chronic hemodialysis, (8) ability to pay, (9) social worth of the patient—the exclusion of drug addicts, criminals, prostitutes, and the mentally retarded or psychotic, and (10) physician bias.

All these rules of exclusion can be criticized to a greater or lesser degree. For example, there may be more justification for medical criteria and treatment requirements for exclusion than age, ability to pay, or social worth. Rules of exclusion are preferable and easier to apply than are rules of final selection. Properly applied, exclusion criteria are "probably less subjective, less arbitrary, and more acceptable to patient and doctor than the rules of final selection."[1] Serious ethical and moral dilemmas in the face of limited resources are posed where either exclusion or selection rules, or both, are unavoidable, as in the pre-1973 hemodialysis situation.

The two basic approaches in the selection process of patients for the allocation of scarce medical resources are: (1) comparison of the social worth of the various patients remaining in the selection pool, and (2) selection based on chance such as a first-come, first-served rule or selection by a lot. Most physicians seem to prefer the selection of patients by a lot or on a first-come, first-served basis.[1] A waiting list procedure is also probably more acceptable to the patient and his family than is a social worth evaluation. However, ethical problems would arise when exceptions need to be made in applying the first-come, first-served rule. Should the President of the United States or a brilliant scientist receive preference in the allocation of a scarce resource? Should a mother of small children or a young person be preferred over a single or older person? Does not such preference negate the first-come, first-served rule and apply the social worth approach, so understandably objectionable to many people? Practical necessity and the public conscience may, however, require exceptions to be made.

Another approach is to combine the exclusion and the selection criteria into a single slightly different set of both medical and social factors such as constituency (eg, children's hospitals will not serve adults), progress of science, prospect of success, life expectancy, family role, potential future contributions, and past services rendered.[2] Each of these factors is not totally objective. Rescher,[2] the author of this system of scarce resource allocation, recognizes its imperfections and suggests that an element of chance or random selection should also be introduced, but "limited and circumscribed by other weightier considerations, along some such lines as those set forth above."[2]

Another approach is advocated by Childress[3] who presents a method and ethical argumentation for randomness as the most equitable means of distributing scarce medical resources after medical selection has been made. He strongly criticizes the social worth criteria and condemns Rescher[2] for failing to give attention to the moral values that random selection might preserve.

A variety of formulations for the allocation of scarce medical resources based on different concepts of social justice is provided by Outka[4]: (1) to each according to his merit, (2) to each according to his societal contribution, (3) to each according to his contribution in satisfying whatever is freely desired by others in the open marketplace of supply and demand, (4) to each according to his needs, and (5) similar treatment for similar cases.

In 1973, when Congress passed (PL 92-603) the now famous End Stage Renal Program, all ethical problems relating to hemodialysis were seemingly solved. Hemodialysis was no longer to be considered exotic or "extraordinary" care. This former scarce medical resource was to be made available to all who needed it and paid for by Medicare. The number of patients being dialyzed increased from less than 2,000 in 1968 to more than 70,000 in 1981. Many patients previously not dialyzed, such as diabetics and elderly people, were entered into dialysis programs, but the total cost of the program became prohibitive. In 1982, major governmental reductions in budgetary allocations for many programs began to be implemented. The resources for hemodialysis are again becoming scarce and limited, as they were prior to the 1973 legislation. The ethical dilemmas described here are again with us, but now new dimensions have been added.

The critical issues are not only who the allocators should be, but what should be decided. Is it worthwhile to dialyze all patients with end stage renal disease? Is it worthwhile to expend time of medical personnel to search for a dialysis program for a social outcast? How can one square such a decision with the suffering and indifference to mothers with screaming babies in the emergency room of that same hospital?[5]

Between 1973 and 1982, when Medicare paid for most hemodialysis in the United States, criteria were relaxed, the number of eligible patients multiplied manyfold, and hemodialysis facilities were markedly expanded. Economic necessity now dictates new decisions and allocations. The magnitude of the problem may become masked again as it was before 1973, since directors of renal units often do not admit to any shortfall in available places, claiming that medically suitable patients were not being rejected. In other words, a process of rationalization occurs in which medical indications are unconsciously determined by medical resources[6] or by private financing.[7]

Societal allocation of resources

So far I have discussed priority decision-making in resource allocation on the part of the physician, hospital, or institution. The foregoing brief history of governmental involvement in hemodialysis raises the issue of societal allocation and its enormous but finite resources. Should the government proceed with the development of a new bomber for the defense of this country or should those financial resources be allocated to the health of its citizens? How should the limited dollars available for health be allocated? Should hemodialysis take priority over hypertension screening or the treatment of cancer? Political decisions for health may be based on considerations other than rational medical thinking. This governmental macro-allocation process[1] differs in several respects from the micro-allocation decision of the physician at the bedside. The macro-allocation process is far removed from the clinical setting, is impersonal and not emotionally charged, involves large numbers of patients on a nationwide scale, and is not subject to the urgency of acting swiftly in a life or death situation. Macro-allocation or governmental decisions, such as the distribution of funds for medical research, strongly influence the course and direction of this research and consequently, to a large extent, determine whether or not a mode of therapy will ever exist. Governmental decisions can reduce or even eliminate the problem of scarcity[8] as exemplified by the 1973 hemodialysis legislation and funding.

The proper level for governmental regulation and funding of research, development, and operation in areas of scarcity is beyond the scope of this article. A model for more effective governmental allocation of scarce medical resources is described elsewhere.[1] To argue that funds should be shifted from highway construction or military budgets to health care is really naive.[5] Even with major shifts in priorities, problems of allocation of the health dollars will still exist. The various alternatives, such as allocation on the basis of ability to pay, or to have the right connections, or the patient's social worth, or on strict medical criteria, or by lot, or by taking turns or standing in line on a first-come, first-served basis, or any combination of criteria, will continue to be debated. Allocations will continue to be made by individual physicians, clinics, hospitals, institutions, and governmental bodies. To ensure that these decisions and allocations are made wisely, it is essential to understand the moral foundations for such actions.[5]

Examples of mental retardation and hypertension

A bill was presented to the New York State legislature in 1975 for the establishment of community-based homes for the care and education of the mentally retarded at a cost of $70 million annually. Those who spoke against the bill, although concerned about the care for the retarded, argued that these clients equalled only 0.1% of the state's population, and that the money could buy hot lunches for all the state's school children, or provide job training for productive members of society. Others argued that the money could be used more efficiently in providing health care for normal children, for those engaged in productive labor, and for pregnant women. One physician showed that much mental retardation can be eliminated through prenatal diagnosis, which he estimated to cost $200 per case for Down's syndrome compared with $60,000 for each institutionalized child. Who has first claim on health care resources? It is very difficult to rank many social goods such as health care, education, and the environment.[8] The greater good of the greater number seems to be the ethical standard of lawmakers and public servants in a democratic society, since sacrificing the many for the few would only hurt the majority without substantially helping the unfortunate few.[8]

Another example illustrating ethical issues in allocating resources is the case of hypertension. Hypertension is one of America's foremost health problems. It affects about 25 million Americans—both men and women—and is the single most important risk factor for cardiovascular disease; it kills and cripples more people than any other disease. The higher the blood pressure, the greater the risk of strokes, heart attacks, and other disabling or fatal events.

Despite the importance of hypertension and the presumed efficacy of antihypertensive treatment, 30% to 50% of American hypertensives are not aware that they have high blood pressure; half of those who know they have it are not under treatment, and of those who are being treated, only half have brought their blood pressures under control.[9]

From a public policy standpoint, it can be argued that a major national effort should be undertaken to provide treatment to as many of the untreated hypertensives as possible. Some advocate mass public screening programs. On the other hand, treatment is costly, accompanied by side effects, and many who are found to be hypertensive do not achieve blood pressure control because they drop out of treatment or because they fail to adhere to treatment regimens, or because their providers fail to prescribe effective treatment.

Hypertension detection and treatment must compete for resources with other programs and activities both within and outside of health care. More hypertension treatment might mean fewer nutrition programs or fewer coronary care units. Moreover, the limited resources available for hypertension must be allocated in the best possible way, consistent with societal goals and principles. How should hypertension treatment resources be allocated—by blood pressure level, age, sex, or other criteria? Considering that many patients do not adhere to medical regimens, is treatment of hypertension nevertheless a wise use of resources? Under what conditions? For what target populations? Generally, how should resources be divided among screening for unaware hypertensives, treatment of known hypertensives, and interventions to promote adherence to medical regimens among those under treatment?[9]

An analysis of policy toward hypertension and a systematic effort to clarify the issues that bear most heavily on such questions of resource allocation as well as suggested answers are available for the interested reader.[10]

Many other examples could be cited. Enormous resources of personnel, equipment, time, blood and blood products, and physical and emotional effort are expended on the care of a relatively small number of patients in intensive care units. In one American study, 54% of such patients had died by one month and 73% within 12 months.[11] Providing intensive care to one group of patients has secondary effects on others in that resources are diverted from a large number of moderately sick patients to a few very ill patients. The most critically ill patients should derive sufficient benefit to justify the expenditures and allocations of personnel and equipment.[11] A similar plea comes from England for health authorities to make wise but difficult decisions, within a finite cash limit, for the allocation of funds to high-technology medicine such as coronary-artery bypass surgery and renal transplantation.[12]

The problem of the allocation of scarce medical resources has been succinctly summarized as follows[1]:

> Medical science has recently developed a number of complex and expensive treatments capable of saving life. Because it is not yet possible to make these treatments available to all in need, it is necessary to decide to whom the treatment will be given. Sometimes a large number of patients could all receive substantially equal medical benefit from the treatment. In this situation, doctors have wondered whether they should at-

tempt to save the patient of greater value to society. Those who think they should, have considered age, family, and potential social contribution in making allocation decisions. Since others think that social worth is relevant but insist that the factor is not one for a doctor to evaluate, hospitals have occasionally delegated allocation decisions to committees drawn from the community or from the community and the hospital staff. A third group maintains that social worth is not a proper consideration in allocating scarce resources. They apply a random or first-come rule of selection. These doctors, however, are willing to eliminate from consideration patients who are deemed unsuitable for treatment. It appears that when a resource is scarce, this finding of unsuitability may in part reflect notions of social worth.

The Jewish view

General principles. In Jewish tradition a physician is given specific Divine license to practice medicine. According to Maimonides and other codifiers of Jewish law, it is in fact a physician's obligation to use his medical skills to heal the ill. Not only is the physician permitted and even obligated to minister to the ill, but the patient is also obligated to care for his health and life. Man does not have full title over his life or body; he is charged with preserving, dignifying, and hallowing that life. He must eat and drink to sustain himself, and must seek healing when he is ill.

Another cardinal principle in Judaism is that human life is of infinite value. The preservation of human life takes precedence over all Biblical commandments, with three exceptions—idolatry, murder, and incest. Life's value is absolute and supreme. Thus, an old man or woman, a mentally retarded person, a monster baby, a dying cancer patient, and their like all have the same right to life as you or I. To preserve a human life, the Sabbath and even the Day of Atonement may be desecrated, and all other rules and laws, save the three exceptions, are suspended for the overriding consideration of saving a human life.

The corollary of this principle is that one is prohibited from doing anything that might shorten a life even for a very brief time since every moment of human life is also of infinite value. How does Judaism resolve the dilemma of two patients dying of kidney failure and only one available dialysis machine? Who takes precedence? How does one decide? Is one not condemning one patient to death by offering the dialysis machine to the other patient?

Allocation priorities as described in the Talmud. The classic source in Judaism that discusses priorities is the Talmud* (Horayoth 3:7), which states that a man takes precedence over a woman in matters concerning the saving of life (because he has more Biblical commandments to fulfill) and the restoration of lost property, but a woman takes precedence over a man in respect of clothing (because a woman's shame of wearing shabby clothes is greater than that of a man), and ransom from captivity (because she may be raped by her captors). When both are exposed to immoral degradation in their captivity, the man's ransom takes precedence over that of the woman (to spare him the indignity of pederasty).

The Talmud (Horayoth 13a) continues:

> If a man and his father and his teacher were in captivity, he takes precedence [in procuring his ransom] over his teacher and the latter takes precedence over his father while his mother takes precedence over all of them [because her dignity is at stake]. A scholar takes precedence over a king of Israel, for if a scholar dies, there is none to replace him while if a king of Israel dies, all Israel are eligible for kingship. A king takes precedence over a High Priest . . . a High Priest takes precedence over a prophet . . .

Finally the Talmud (Horayoth 3:8) concludes that:

> A Priest takes precedence over a levite, a levite over an Israelite, an Israelite over a bastard, a bastard over a *Nathin* [descendant of the Gibeonites whom Joshua made into Temple slaves, cf Joshua 9:27], a *Nathin* over a proselyte and a proselyte over an emancipated slave. This order of precedence applies only when all these are in other respects equal. If the bastard, however, was a scholar and the High Priest an ignoramus, the learned bastard takes precedence over the ignorant High Priest.

It thus seems that Judaism considers religious status, personal dignity, and social worth as determining factors in the allocation of limited ransom money to redeem captives from their captors. Would Judaism view differently the situation where someone's life, rather than personal dignity, is at stake?

It is a cardinal principle of Judaism that one may not sacrifice one life to preserve another. In his classic Code known as *Mishneh Torah* (Laws of the Fundamental Principles of the Torah 5:7), Moses Maimonides states that "logic dictates that in regard to taking the life of an Israelite to cure another individual or to rescue a person from one who threatens violence, one may not destroy one human life to save another human life." The reason is cited in the Talmud (Pesachim 25b) in that the blood of one person is no redder than the blood of another.

The classic example is cited by Maimonides (*loc cit* 5:5) as follows:

> . . . if heathens said to Israelites: "surrender one of your numbers to us, that we may kill him: otherwise, we will kill all of you," they should all let themselves be killed rather than surrender a single Israelite to them . . . .

When a physician chooses one patient over another to provide a scarce or limited type of treatment such as dialysis, he is not actively killing the other patient. However, if six patients occupy six intensive care beds and another patient arrives, should the physician transfer one of the six patients out to make room for the new person? Does such an act constitute an act of murder if the patient transferred out of the intensive care unit dies? Certainly not! The transfer had to be made. But what criteria does Judaism require to make the determination to transfer one patient to make room for another if "one person's blood is no redder than that of another?" The case of the two dialysis patients is different since the physician is only initiating treatment for one of them because no dialysis machine is available for the other. In the intensive care unit, however, the physician is actively removing the patient from the intensive care unit and relegating him to receive less than intensive care.

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* Unless otherwise stated, all Talmudic citations refer to the Babylonian *Talmud*.

Another classic Jewish source relating to the allocation of scarce resources is the case cited in the Talmud (Baba Metzia 62a) of two people in the desert and one has a pitcher of water. If both drink, they will both die, but if one only drinks, he can reach civilization. One Sage rules that it is better that both should drink and die, rather than that one should behold his companion's death. But R. Akiba rules the one who owns the pitcher only drinks because "thy life takes precedence over his life," ie, do not sacrifice your life to save another since "his blood is no redder than yours." Some commentaries assert that if neither owned the pitcher, then both should drink because of the principle "one may not sacrifice one life to preserve another." This case seems to be somewhat analagous to the lifeboat ethics situation. If the lifeboat is about to capsize because of excessive weight, should one or more people be thrown overboard to save the others or should everyone remain on board and all will drown? There are no easy answers.

The hierarchy of precedences in Judaism enumerated here seems to contradict the rule that "one may not sacrifice one life to preserve another." How can these two approaches be reconciled? The precedences seem to suggest that qualitative distinctions can be made on the basis of either social worth, personal dignity, or religious status. The rule that "one may not sacrifice one life to preserve another" seems to imply that no qualitative distinctions should be allowed. A person can will his organs for transplantation to save the lives of others after he dies. He cannot, however, say: Kill me and transplant my organs to preserve others because "his blood is no redder than theirs." Therefore, in the allocation of scarce medical resources, perhaps a lottery system or a first-come, first-served approach, or pure medical criteria, might be preferable in Judaism.

An approach based on medical criteria is suggested by R. Eliezer Yehuda Waldenberg in his *Responsa Tzitz Eliezer* (vol 9, sect 17, chap 10, par 5, Jerusalem 1967) where he states that a patient with a potential for cure takes precedence in the allocation of scarce medical resources over a patient whose illness would at best be only temporarily controlled. This rule, however, applies only when the incurable patient is passively neglected in favor of the curable patient. To terminate the therapy of the incurable patient, continues Waldenberg, so that the curable patient can be given those resources, is forbidden. The same author rules (ibid vol 9, sect 28, par 3) that if there is only sufficient medication for one of two patients, then the critically ill patient takes precedence over the less seriously ill patient. However, if the medication belongs to the less seriously ill patient, he is not obligated to give it to the critically ill patient because "thy life takes precedence over his life." If both patients are dangerously ill and the medicine belongs to neither, one should divide the medication equally, thereby providing each patient with a one- or two-day extension of life. In the meantime, either Divine intervention may heal them or additional medication may be found.

Societal allocation of scarce resources in Jewish law. In addition to the axiom that "thy life takes precedence over his life," Judaism subscribes to a specific sequence of priority in regard to assisting one's fellowman in that *thou shalt open thine hand unto thy brother, to thy needy, and to thy poor, in thy land* (Deuteronomy 15:11). Does this sequence also apply to matters of life and death and to the allocation of scarce medical resources? Would Judaism require that a Jew receive precedence over a non-Jew, or a religious Jew receive precedence over a nonreligious Jew in the decision about who is to be dialyzed if only one machine is available, or who is to receive the intensive care bed if only one is available? Certainly not!

The infinite worth of man, a Judaic axiom already cited earlier, is compromised by limited or finite resources. Why should a resident physician have to decide which patient gets the intensive care bed? Why not create more intensive care beds rather than support museums? Why not build more dialysis machines rather then buy more tanks or battleships? These are societal decisions and one may legitimately ask whether allocation decisions and axioms affecting individuals apply equally to societal or institutional problems. Is society a separate being and more than the sum of its component parts? According to R. Moshe David Tendler,[13] the answer is strongly affirmative. Societal ethics are indeeed different from individual ethics. Society or government, according to Tendler, is needed to prevent man from destroying his fellowman. Therefore, society is not bound by the same ethical principles that bind individuals, such as the infinite worth of man. Support for this view can be found in several Jewish writings.

The Talmud (Gittin 3:6) asserts that captives should not be redeemed for more than their value, to prevent abuses. The reason for this rule, according to the commentator R. Obadiah of Bertinoro, is so that captors should not be encouraged to seize more captives and make excessive ransom demands. The Talmud (Gittin 45a) then raises the question:

> Does this prevention of abuses relate to the burden on the community [to redeem the captives] or the possibility that the bandits will be encouraged to increase their activities? Come and hear: Levi ben Darga ransomed his daughter for 13,000 denari of gold [showing that if an individual is willing to pay more he may do so, and the reason is because of the financial burden imposed on the community]. Said Abaye: But are

you sure that he acted with the consent of the Sages? Perhaps he acted contrary to the will of the Sages.

Thus, two reasons are given why it is forbidden to pay an exhorbitant amount of money to ransom anyone: to discourage kidnappers and to prevent society from becoming impoverished by having to divert its resources to the ransoming of captives. Society would thus be unable to provide for the needs of all the people it serves. The Codes of Jewish law rule in accordance with the Talmud that society may not expend excess money to redeem captives. However, a husband may ransom his wife for any amount and a father may ransom his son or daughter for any amount, as did Levi ben Darga. Thus, we clearly see that societal ethics are different from individual ethics.

Tendler[13] cites another source to support his thesis that society is not bound by the same principles as are individuals in the allocation of scarce medical resources. The Talmud (Nedarim 80b) describes a situation of a water supply belonging to town A situated on a hill. Town B situated at the bottom of the hill cannot obtain water unless the townspeople of town A do not water their flock and/or launder their clothes. R. Jose rules that the townspeople from town A at the top of the hill take precedence over those of town B. Although the immediate danger is to the people of town B who have no water at all, the long-term danger from not washing one's body and clothes to the people of town A who have the water overrides the immediate needs of the people of town B at the bottom of the hill. The Talmudic Sage Samuel said (Nedarim 81a) that scabs of the head caused by not washing can lead to blindness; scabs arising through the wearing of unclean, ie, unlaundered, garments can cause madness; scabs due to neglect of the body can cause boils and ulcers.

Thus we have clear evidence that society must be concerned about (1) future generations, (2) long-range planning, and (3) long-range effects of its actions. This is not so for individuals. The physician in the intensive care unit must make decisions that affect individual patients here and now. The two individuals in the desert with a single pitcher of water should share that water if it belongs to neither one because they have to be concerned with preserving their lives here and now; maybe they will be rescued tomorrow. The allocation of a medicine or treatment to one of two patients if there is not enough for both is a decision needed for the here-and-now care of one or both patients. An individual researcher using radioisotopes is concerned with the immediate safety from radiation to himself and his co-workers. Additionally, society has to be concerned about the disposal of nuclear wastes because of the danger to future generations of the radioisotopes used today.

However, one cannot totally divorce individuals from responsibility to consider future generations in the allocation of resources. Perhaps this point is most beautifully dipicted in the Talmudic story (Taanith 23a) of the righteous Choni the Circle-Drawer who was journeying on the road and saw a man planting a carob tree; he asked him: how long does it take for this tree to bear fruit? The man replied: seventy years. Choni then further asked him: are you certain that you will live another seventy years? The man replied: I found ready-grown carob trees in the world; as my forefathers planted these for me, so I too plant these for my children.

Conclusion

The allocation of scarce resources is a complicated multifaceted issue associated with many moral and ethical dilemmas. Many systems have been proposed to equitably distribute the finite medical resources and to make allocation decisions consonant with basic principles of ethics, none of which is perfect; all have positive and negative attributes. The criteria to be used by an individual or clinic or hospital division or department may differ from those to be used by large institutions or governmental bodies.

Judaism views each human being as being of supreme and infinite value. It is the obligation of both individuals and society in general to preserve, hallow, and dignify human life, and to care for the total needs of individual citizens to enable them to be healthy and productive members of society. This fundamental principle should help guide the physician making life and death decisions at the bedside for individual patients, as well as governmental bodies that are responsible for deciding short- and long-term health needs and priorities for the population as a whole.

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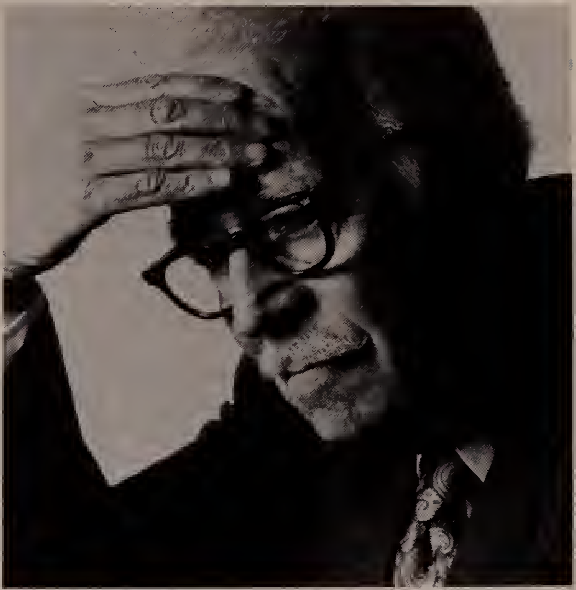

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(*CME Sampler continued from page 344*)

But the unpredicted set of consequences, which are of greater and greater concern, began when the specialty societies, but more importantly the state medical societies and state licensing boards, began to "require" PRA-type credits for renewal of membership and relicensure. The lifeline of the physician thus came under assault, the voluntary aspect of the program immediately became mandatory, and a new set of rules emerged. The stimulus had become the goal: the PRA credit-hours, especially Category 1, became a necessity, and thereby acquired a new value.

There were three major effects of this turn of events. The first was the creation of a potential multimillion-dollar market in entrepreneurial educational activity. Every physician now had to assure protection of his ability to continue to practice, and the goal of the game was set, for all practical purposes, at 150 hours of Category 1 PRA credits every three years. The task became to do it as conveniently as possible, given the rules of the game set up by the AMA, the state bodies and the various specialty groups — and to document it. If the rules thus became defined for the practitioners it follows that they would also be changed for the educators. A multimillion-dollar market is not to be ignored by anyone, and the conditions for participation by the educators of greatest importance, the medical-school faculty, are now being reset. The clinical faculty members are not about to allow their capability to be marketed unless they are the principal benefactors. Their period of "voluntary" continuing-education activity thus seems to be coming to an end.

The second major effect follows from the first — namely, a digression of the effort in continuing medical education, a distraction from the complex task of rationalizing continuing education. The basic element of that rationalization effort had been to deal with the problems of effectiveness and efficiency by getting at the key issue of demonstration of educational need. Granted that this was an exceedingly difficult undertaking in a society such as ours with its ethical, political and economic emphasis on preservation of individual freedoms, the fact remains that there is now a new emphasis — that the dog is not being wagged vigorously by the tail of marketable educational technology.

Portentous as these two effects may be, there is yet a third that enters the public domain and exposes the profession completely, if inappropriately. If state legislatures are to establish medical-practice acts that seek to reassure the public of the continued competence of its health-care professionals they can hardly be expected to do so for long on such flimsy evidence as compliance with PRA requirements. To emphasize this point, one need only look at the minimal nature of the requirements. A single luxury-liner cruise every three years, plus sporadic attendance at assorted conferences, rounds and meetings, with some padding in the lesser categories, will not be reassuring to the public and its legislators for very long. It will not take long for critics of the American health-service system to cry fraud. Their position will not be entirely unreasonable, and there will have to be a response.

The problem here is that the issues of assurance of high-quality medical care to the American public continue to be confused with the issues of continuing education for physicians. Put in its simplest form, assurance of quality is a matter of supervision of what a physician does, with implementation of corrective measures to change his behavior in a proper direction. Continuing medical education is not an effective, or even a reasonable, way of getting around the fact that the collective American physician is opposed to, and has successfully resisted, supervision of his work.—**PATRICK B. STOREY.** Mandatory Continuing Medical Education: one step forward — two steps back. *N Engl J Med* 1978; 298: 1417.

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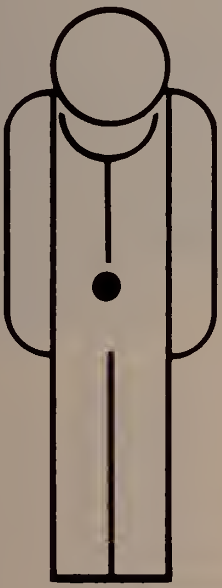

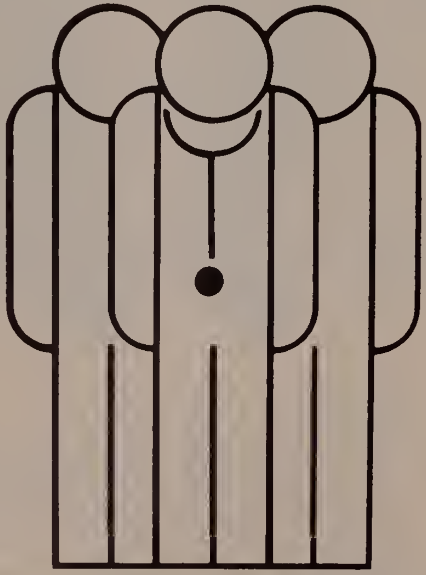

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10,000,000 alcoholics. Ethanol may produce many effects that together bring about nutritional deficiencies, so that alcoholism affects nutrition at many levels.[1]

25,500,000 geriatric patients. The older patient may have some disorder or socioeconomic problem that can undermine good nutrition.[2]

23,500,000 surgical patients. Nutritional status can be compromised by the trauma of surgery; and some operations interfere with the ingestion, digestion and absorption of food.[3]

Before prescribing, please consult complete product information, a summary of which follows:
Each Berocca® Plus tablet contains 5000 IU vitamin A (as vitamin A acetate), 30 IU vitamin E (as *dl*-alpha tocopheryl acetate), 500 mg vitamin C (ascorbic acid), 20 mg vitamin B_1 (as thiamine mononitrate), 20 mg vitamin B_2 (riboflavin), 100 mg niacin (as niacinamide), 25 mg vitamin B_6 (as pyridoxine HCl), 0.15 mg biotin, 25 mg pantothenic acid (as calcium pantothenate), 0.8 mg folic acid, 50 mcg vitamin B_{12} (cyanocobalamin), 27 mg iron (as ferrous fumarate), 0.1 mg chromium (as chromium nitrate), 50 mg magnesium (as magnesium oxide), 5 mg manganese (as manganese dioxide), 3 mg copper (as cupric oxide), 22.5 mg zinc (as zinc oxide).

Indications: Prophylactic or therapeutic nutritional supplementation in physiologically stressful conditions, including conditions causing depletion, or reduced absorption or bioavailability of essential vitamins and minerals; certain conditions resulting from severe B-vitamin or ascorbic acid deficiency; or conditions resulting in increased needs for essential vitamins and minerals.
Contraindications: Hypersensitivity to any component.
Warnings: Not for pernicious anemia or other megaloblastic anemias where vitamin B_{12} is deficient. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with vitamin B_{12} deficiency who receive supplemental folic acid and who are inadequately treated with B_{12}.
Precautions: *General:* Certain conditions may require additional nutritional supplementation. During pregnancy, supplementation with vitamin D and calcium may be required. Not intended for treatment of severe specific deficiencies. *Information for the Patient:* Toxic reactions have been reported with injudicious use of certain vitamins and minerals. Urge patients to follow specific dosage instructions. Keep out of reach of children. *Drug and Treatment Interactions:* As little as 5 mg pyridoxine daily can decrease the efficacy of levodopa in the treatment of parkinsonism. Not recommended for patients undergoing such therapy.
Adverse Reactions: Adverse reactions have been reported with specific vitamins and

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5,000,000 hospital patients with infections.[4] Many are anorectic and may have a markedly reduced food intake. Supplements are often provided as a prudent measure because the vitamin status of critically ill patients cannot be readily determined.[3]

The incalculable millions on calorie-reduced diets. Patients ingesting 1000 or fewer calories per day could be at high risk because this intake may not supply most nutrients in adequate amounts without supplementation.[5]

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Berocca Plus Tablets provide: therapeutic levels of ascorbic acid and B-complex vitamins; supplemental levels of biotin, vitamins A and E, and five important minerals (iron, chromium, manganese, copper and zinc); plus magnesium. Berocca Plus is not intended for the treatment of specific vitamin and/or mineral deficiencies.

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highly acceptable to patients, has virtually no odor or aftertaste and is economical. And its "Rx only" status means more physician involvement, better patient compliance.

References: 1. Shaw S, Lieber CS: Nutrition and alcoholism, chap. 40, in *Modern Nutrition in Health and Disease*, edited by Goodhart RS, Shils ME. Philadelphia, Lea & Febiger, 1980, pp. 1220, 1237. 2. Watkin DM: Nutrition for the aging and the aged, chap. 28, in *Modern Nutrition in Health and Disease, op. cit.*, p. 781. 3. Shils ME, Randall HT: Diet and nutrition in the care of the surgical patient, chap. 36, in *Modern Nutrition in Health and Disease, op. cit.*, pp. 1084, 1089, 1114. 4. Dixon RE: *Ann Intern Med 89* (Part 2): 749-753, Nov 1978. 5. Committee on Dietary Allowances, National Research Council: Recommended Dietary Allowances, ed 9. Washington, National Academy of Sciences, 1980, p. 13.

minerals, but generally at levels substantially higher than those in Berocca Plus. However, allergic and idiosyncratic reactions are possible at lower levels. Iron, even at the usual recommended levels, has been associated with gastrointestinal intolerance in some patients.
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THE MULTIVITAMIN/MINERAL FORMULATION

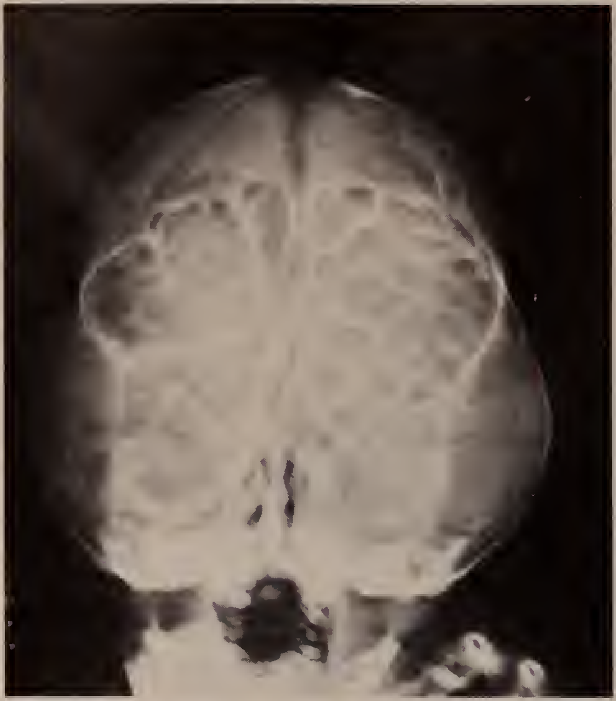
Radiologic Problem of the Month

Montefiore Hospital and Medical Center
The Bronx, New York

Editor

KAKARLA SUBBARAO, M.D.
Professor of Radiology at
Albert Einstein College of Medicine

Deformed Skull



A 3-month-old infant was brought by the mother for treatment of a progressive deformity of the head.

Elucidation

Anteroposterior view of the skull reveals grotesque deformity of the skull (Fig). It is trilobed with multiple lacunae in the frontal bone. The anterior fontanelle is open but the squamosal sutures are fused. The coronal and lambdoid sutures are approximated. This is the typical radiologic appearance of a cloverleaf skull or trefoil skull as a result of premature closure of sutures.

Cloverleaf skull (Kleeblattschädel) was first described in Germany in 1960 although recognized since 1823.[1] The etiology is not known but deformity of the skull may be seen isolated or with other congenital syndromes affecting growth such as thanatophoric dwarfism, craniofacial dysostosis, and rarely with achondroplasia.

Clinically, the basic features include a trilobed ballooning of the head with displacement of the ears parallel with the shoulders. A small recessed nasal root is often present with hypertelorism, exophthalmos, and corneal opacification. The deformity is recognized at birth but progresses rapidly in the first few months of life, leading to death. However, one child is reported to have lived for eight years.[2] Aqueductal stenosis and other congenital anomalies of the cranium may be present, producing hydrocephalus. Mental retardation and limb anomalies are also associated on occasion.

The basic radiologic features include premature fusion of coronal and lambdoid sutures with downward displacement of the middle cranial fossa producing the cloverleaf appearance of the skull in anteroposterior projection. This abnormality is presumed to be connected with the development of the vascular plexus of the inner periosteum of the skull and dura.[2] It is also believed that there is an undue persistence of embryonic vascular tissue in these membranes which in some way alters the ossification and sutural organization of the bones of the cranial vault. The hydrocephalus is regarded as a secondary event due to interference with the drainage of the cerebrospinal fluid through the foramina of Magendie and Luschka. These foramina are compressed by the distorted hind brain which in itself has resulted from the malformed bony cranium.[1,2]

Radiologically, a single anteroposterior view of the skull depicts the classic description of cloverleaf skull. The degree of deformity varies with each case. Lacunar rarefaction and large defects in frontal, temporal, and occipital bones are generally present. The symmetrical nature of deformity often helps in differentiating this from other skull deformities associated with congenital syndromes such as Crouzon's disease and acrocephalosyndactyly. The radiologic features of short ribs, flat vertebral bodies, and so on indicate the diagnosis of thanatophoric dwarfism, which can be associated with cloverleaf deformity of skull.[3] Cerebral angiography and computed cranial tomography definitely contribute to studying the nature and extent of this abnormality.

This child has no other abnormality. However, death occurred at 8 months of age as a result of progressive hydrocephalus.

Diagnosis

Isolated cloverleaf skull (*Kleeblattschädel*)

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2. Wollin DG, Binnington VI, Partington MW: Cloverleaf skull. *J Canad Assoc Radiol* 1968; 19:148–154.
3. Young RS, Pochaczevsky R, Leonidas JC, et al: Thanatophoric dwarfism and cloverleaf skull ("Kleeblattschädel"). *Radiology* 1973; 106:401–405.

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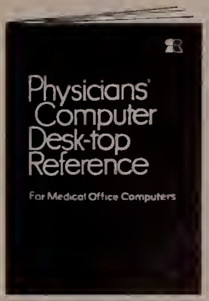

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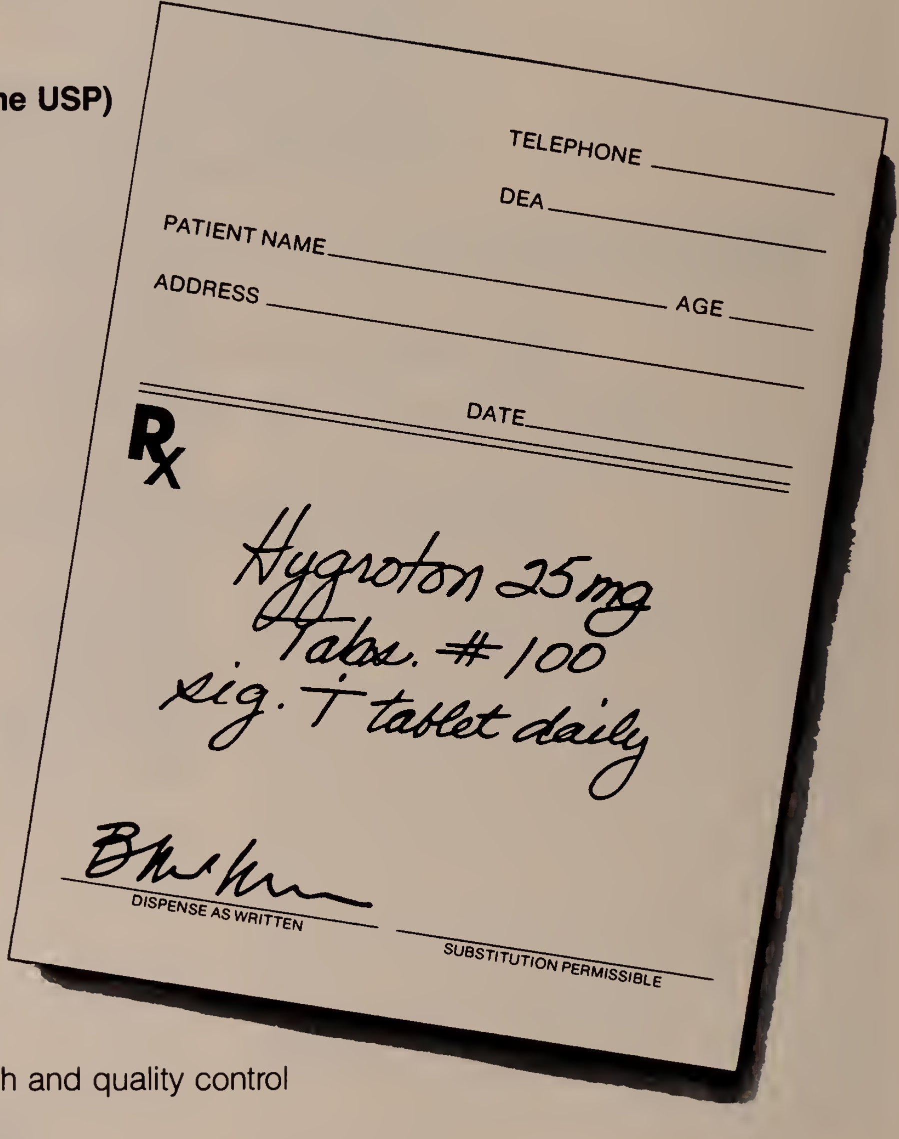

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Contraindications: Anuria, hypersensitivity to chlorthalidone or other sulfonamide-derived drugs.

Warnings: Should be used with caution in severe renal disease, impaired hepatic function or progressive liver disease. May add to or potentiate the action of other antihypertensive drugs. Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma. There is a possibility of exacerbation or activation of systemic lupus erythematosus with thiazides, which are related to chlorthalidone. This has not been reported with chlorthalidone. Thiazides cross the placental barrier and appear in cord blood. Use in pregnant women requires that the anticipated benefits of the drug be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. In nursing mothers, thiazides cross the placental barrier and appear in breast milk. If use of the drug is essential, the patient should stop nursing.

Precautions: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals. All patients receiving chlorthalidone should be observed for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Hypokalemia may develop with chlorthalidone as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH. Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity. Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather. Hyperuricemia may occur or gout be precipitated in certain patients. Insulin requirements in diabetic patients may be increased, decreased, or unchanged and latent diabetes mellitus may become manifest. Chlorthalidone and related drugs may increase the responsiveness to tubocurarine. The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient. Chlorthalidone and related drugs may decrease arterial responsiveness to norepinephrine. If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy. Chlorthalidone and related drugs may decrease serum PBI levels without signs of thyroid disturbance.

Adverse Reactions: Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis; dizziness, vertigo, paresthesias, headache, xanthopsia; leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia; purpura, photosensitivity, rash, urticaria, necrotizing angiitis (vasculitis) (cutaneous vasculitis), Lyell's syndrome (toxic epidermal necrolysis). Orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates or narcotics. Other adverse reactions include hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness, impotence. Whenever adverse reactions are moderate or severe, chlorthalidone dosage should be reduced or therapy withdrawn.

Usual Dose: One tablet daily.

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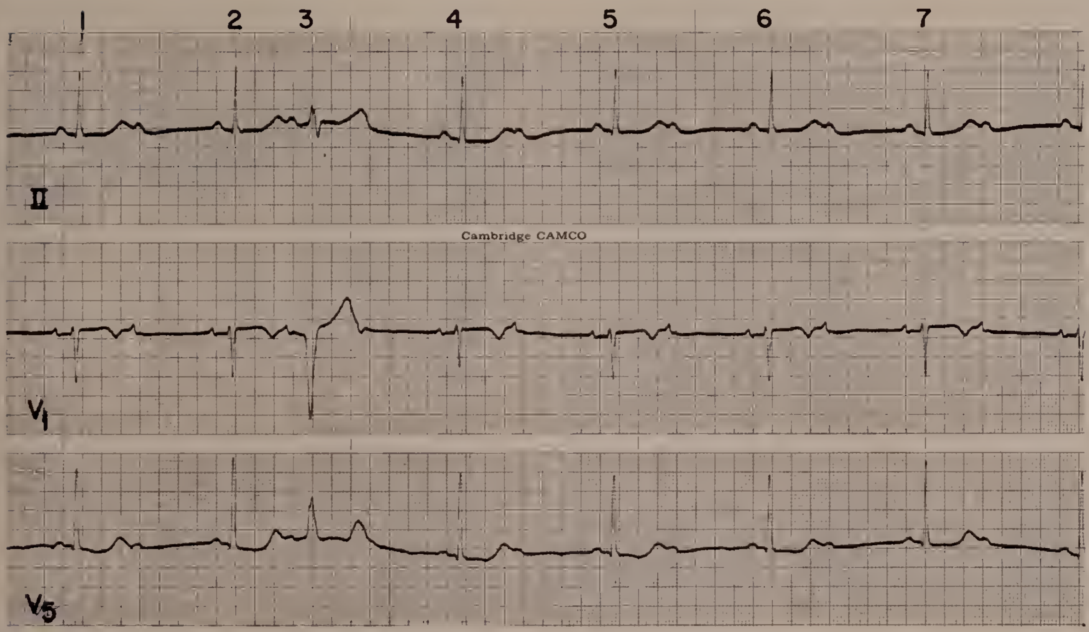
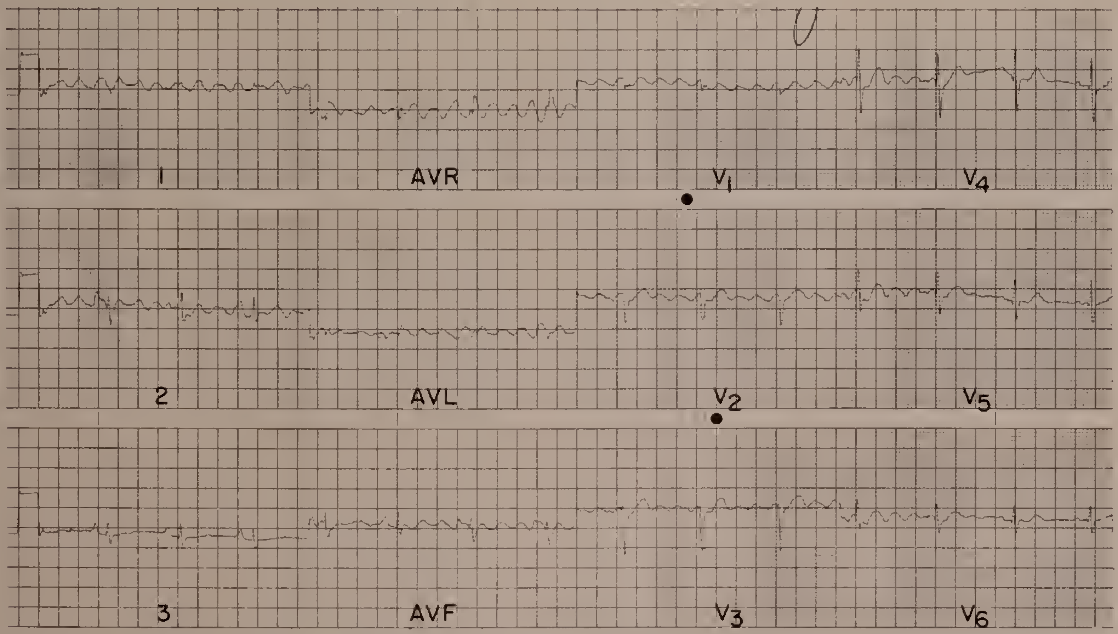
Electrocardiograms of the Month

Montefiore Hospital and Medical Center
The Bronx, New York

Editors
IRA L. RUBIN, M.D.
Head, Department of Electrocardiography
JULIAN FRIEDEN, M.D.
Associate Head, Department of Electrocardiography



QUESTION 357. Leads II, V_1 and V_5 taken simultaneously. What is the rhythm?



QUESTION 358. The electrocardiogram was obtained from a 78-year-old man on admission to the hospital. What is the interpretation?

ELUCIDATION

Answer 357. The atrial rate is 73/min. After the third QRS there are two P waves for each QRS and the PR interval of the conducted beat is 0.18 sec. The rhythm is 2:1 A-V block, probably Mobitz I since the QRS is normal. The PP interval encompassing the QRS is 0.04 sec shorter than the PP interval between the QRS complexes (ventriculophasic sinus arrhythmia).

The P wave following QRS 2 is conducted with a PR interval of 0.22 sec and followed by an aberrantly conducted QRS. The next P wave at the end of the T wave is blocked. This is Wenckebach periodicity with 3:2 A-V conduction. QRS 3 is wide due to refractiveness of one of the bundles, probably the left. An alternate explanation of QRS 3 is that it is a ventricular premature depolarization.

A 2:1 A-V block may be due to Mobitz I or Mobitz II. When the QRS has a normal duration, Mobitz I is usually present. The presence of Wenckebach periodicity confirms this diagnosis.

Answer 358. The ventricular rhythm is regular at a rate of 80/min. Undulations of the baseline are present between the QRS complexes at a rate of approximately 300/min. In lead III undulations are absent and distinct P waves are seen with a PR interval of 0.14 sec. No change in ventricular rate is present. The QRS is normal with borderline low voltage.

Since the ventricular rate is constant, regular sinus rhythm must be present throughout the tracing. The undulations are due to an artifact. The patient has Parkinsonism. The tremor has a rate similar to that of atrial flutter. In this patient, the Parkinsonism involved primarily the right side since the left-sided lead, lead III (left arm and left leg), did not reveal the undulations.

Obituaries

Arthur S. Abramson, M.D., of the Bronx, died November 2, 1982 at the age of 70. He graduated from McGill University Faculty of Medicine in 1937 and was a member of the Academy of Medicine; New York Society for Physical Medicine and Rehabilitation; American Rheumatism Association; American Academy of Physical Medicine and Rehabilitation; Fellow of American College of Physician; Diplomate American Board of Physical Medicine and Rehabilitation, Bronx County Medical Society; Medical Society of the State of New York.

Amin Assad Audeh, M.D., of Delmar, died June 16, 1981 at the age of 82. He was a 1921 graduate of American University of Beirut School of Medicine, Syria. His memberships included the Medical Society of the County of Albany and the Medical Society of the State of New York.

George Gordon Bemis, M.D., of The Bronx, died October 31, 1982 at the age of 86. He graduated from Harvard Medical School in 1923 and was a member of the Academy of Medicine; New York Obstetrical Society; Fellow American College of Surgeons; Diplomate American Board of Obstetrics and Gynecology; New York County Medical Society; Medical Society of the State of New York.

Samuel B. Burk, M.D., of New York City, died October 20, 1982 at the age of 93. He graduated from Cornell University Medical College in 1911. He was a member of the Academy of Medicine; Fellow of American College of Surgeons; New York County Medical Society; Medical Society of the State of New York.

William H. Button, M.D., of New York City, died August 13, 1982 at the age of 76. He graduated from Columbia University College of Physicians & Surgeons in 1933. His memberships included the Academy of Medicine; Pan American Medical Association; Fellow of American College of Cardiology; Diplomate American Board of Internal Medicine; New York County Medical Society; Medical Society of the State of New York.

Ward L. Ekas, M.D., of Rochester, died October 13, 1982, at the age of 86. He graduated from Johns Hopkins University School of Medicine in 1924. He was a member of the Academy of Medicine; Fellow American College of Obstetricians and Gynecologists; Diplomate American Board of Obstetrics and Gynecology; Medical Society of the County of Monroe; Medical Society of the State of New York.

Leo A. Fleischer, M.D., of New York City, died August 8, 1982 at the age of 88. He was a 1922 graduate of the Deutsche Universitat Medizinische Fakultat, Prague and was a member of the Academy of Medicine; American Psychiatric Association; New York County Medical Society; Medical Society of the State of New York.

Maurice Forman, M.D., of Riverdale, died November 16, 1982 at the age of 86. He graduated from New York University College of Medicine in 1925 and was a member of the American Geriatrics Society; Westchester County Medical Society; Medical Society of the State of New York.

Arthur N. Foxe, M.D., of New York City, died November 19, 1982 at the age of 80. He graduated from the Jefferson Medical College in 1927. He was a member of the Academy of Medicine; New York Neurological Society; Academy of Psychosomatic Medicine; American Psychiatric Association; Pan American Medical Association; American Geriatrics Society; American Board of Legal Medicine; New York County Medical Society; Medical Society of the State of New York.

Robert Franz, M.D., of Lakeview, died October 30, 1982 at the age of 65. He graduated from the University of Buffalo School of Medicine in 1949 and his memberships included the American Urological Association; Fellow of American College of Surgeons; Diplomate American Board of Urology; Medical Society of the County of Erie; Medical Society of the State of New York.

Aron Goldschmidt, M.D., of New York City, died March 26, 1982. He was 83 years old and graduated from Johann-Wolfgang-Goethe-Universitat Medizinische Fakultat, Frankfurt-am-Main, Prussia in 1923. He was a member of the New York County Medical Society and the Medical Society of the State of New York.

Edwin Harrison Griffin, M.D., of Shelter Island, died April 22, 1982 at the age of 70. He graduated from New York University College of Medicine in 1939 and was a member of the New York State Surgical Society; New York Society for Thoracic Surgery; Pan American Medical Association; American Thoracic Society; Fellow American College of Surgeons; Fellow American College of Angiology; Diplomate American Board of Surgery; Diplomate

American Board of Thoracic Surgery; Medical Society of the County of Kings; Medical Society of the State of New York.

Isaak Grunstein, M.D., of New York City, died on September 18, 1982. He was 84 years old and a 1926 graduate of the Albertus-Universitat Medizinische Fakultat, Konigsberg, Prussia. His memberships included the Academy of Medicine; American Public Health Association; Fellow American College of Obstetricians and Gynecologists; Fellow American College of Surgeons; New York County Medical Society; Medical Society of the State of New York.

Donald C. Guyer, M.D., of Loudonville, died July 12, 1982 at the age of 79. He graduated from Albany Medical College of Union University in 1928. He was a member of the Medical Society of the County of Albany; Medical Society of the State of New York.

Theodore Hevizy, M.D., of New York City, died September 16, 1982 at the age of 89. He graduated from Eotvos Lorand Tudomanyegyetem Orvostudomanyi Fakultas, Budapest in 1916. His memberships included the American Public Health Associations; Fellow American College of Chest Physicians; New York County Medical Society; the Medical Society of the State of New York.

Samuel J. Ianacone, M.D., of Rochester, died October 16, 1982, at the age of 61. He graduated from Georgetown University School of Medicine in 1945. He was a member of the Academy of Medicine; American Academy of Ophthalmology and Otolaryngology; Diplomate American Board of Ophthalmology; Medical Society of the County of Monroe; Medical Society of the State of New York.

Kamal Y. Jamal, M.D., of Brooklyn, died August 12, 1982 at the age of 36. He was a 1972 graduate of the Faculty of Medicine Damascus University, Damascus. His memberships included Fellow of American College of Obstetricians and Gynecologists; Diplomate American Board of Obstetrics and Gynecology; Medical Society of the County of Kings; Medical Society of the State of New York.

William A. Kenna, M.D., of The Bronx, died November 19, 1982 at the age of 76. He graduated from Georgetown University School of Medicine in 1932 and was a member of the Bronx County Medical Society and the Medical Society of the State of New York.

Joshua Kern, M.D., of Guilderland, died November 13, 1982 at the age of 84. He was a 1933 graduated of Friedrich-Wilhelms-Universitat Med Fakultat, Berlin, Prussia and a member of the Medical Society of the County of Montgomery; Medical Society of the State of New York.

Norman D. Lazar, M.D., of New York City, died June 15, 1982 at the age of 58. He graduated from the University of Louisville School of Medicine in 1948. He was a member of the American Psychiatric Association; American Psychoanalytic Association; Academy of Psychoanalysis; Diplomate American Board of Psychiatry and Neurology; New York County Medical Society; Medical Society of the State of New York.

Alexander Lewitan, M.D., of Great Neck, died on October 3, 1982 at the age of 72. He was a 1935 graduate of Hamburgische Universitat Medizinische Fakultat in Hamburg and a member of the New York Roentgen Society; Radiological Society of North America, Inc.; Fellow American College of Radiology; Diplomate American Board of Radiology; Medical Society of the County of Kings; Medical Society of the State of New York.

Louis Lostfogel, M.D., of Brooklyn, died June 17, 1982 at the age of 79. He graduated from the Long Island College Hospital in 1926. He was a member of the American Academy of Family Practice; Medical Society of the County of Kings; the Medical Society of the State of New York.

Maurice L. Malins, M.D., of New York City, died September 29, 1982 at the age of 74. He graduated from McGill University Faculty of Medicine in 1932 and was a member of the Academy of Medicine; Fellow American College of Surgeons; Diplomate American Board of Surgery; New York County Medical Society; Medical Society of the State of New York.

Dennis E. May, M.D., of New York City, died April 8, 1982. He was 69 years old and a 1936 graduate of Pecsi Tudomanyegyetem Orvostudomanyi Fakultas, Pecs. He was a member of the New York County Medical Society and the Medical Society of the State of New York.

Anthony V. Mazzara, M.D., of Brooklyn, died January 22, 1982 at the age of 84. He graduated from Universita Degli Studi Di Bologna, Facolta Di Medicine e Chirurgia in 1928. His memberships included the American Society of Abdominal Surgeons; Medical Society of the County of Kings; Medical Society of the State of New York.

M. P. McCarthy-Brough, M.D., of Syracuse, died November 16, 1982 at the age of 81. She graduated from the Womans Medical College of Pennsylvania in 1929. She was a member of the Academy of Medicine; American Academy of Allergy; Fellow American College of Allergists; Onondaga County Medical Society; Medical Society of the State of New York.

James L. McGrane, M.D., of Schenectady, died November 4, 1982 at the age of 70. He graduated from the University of Buffalo School of Medicine in 1941. His memberships included Fellow of American College of Obstetricians & Gynecologists; Fellow of American College of Surgeons; Diplomate American Board of Obstetrics & Gynecology; Medical Society of the County of Schenectady; Medical Society of the State of New York.

Joseph M. Mele, M.D., of Rochester, died July 19, 1982 at the age of 70. He graduated from the University of Buffalo School of Medicine in 1937 and a member of the Academy of Medicine; Medical Society of the County of Monroe; Medical Society of the State of New York.

Clarence Mersky, M.D., of Mamaroneck, died November 10, 1982 at the age of 68. He graduated from the University of London Faculty of Medicine in 1937. He was a member of the American Physiological Society; Society for Experimental Biology and Medicine; Bronx County Medical Society; Medical Society of the State of New York.

Domenic S. Messina, M.D., of Buffalo, died December 26, 1981 at the age of 72. He graduated from the University of Buffalo School of Medicine in 1935 and his memberships included the Academy of Medicine; Fellow American College of Surgeons; Diplomate American Board of Surgery; Medical Society of the County of Erie; Medical Society of the State of New York.

Lawrence J. A. Miano, M.D., of Orchard Park, died September 6, 1982 at the age of 75. He graduated in 1935 from the Stritch School of Medicine of Loyola University. He was a member of the American Academy of Family Practice; American Geriatrics Society; Medical Society of the County of Erie; the Medical Society of the State of New York.

Maria Morgenstern, M.D., of New York City, died August 27, 1982 at the age of 84. She graduated from Medizinische Fakultat der Universitat, Wein in 1925 and was a member of the American Psychiatric Association; New York County Medical Society; Medical Society of the State of New York.

Donald J. Nenno, M.D., of East Amherst, died November 12, 1981 at the age of 61. He graduated from the University of Michigan Medical School in 1946. He was a Fellow of American College of Obstetricians and Gynecologists; Fellow of American College of Surgeons; Diplomate American Board of Obstetrics and Gynecology; a member of the Medical Society of the County of Erie; and the Medical Society of the State of New York.

Samuel Z. Orgel, M.D., of New York City, died September 14, 1982 at the age of 90. He graduated from the New York University College of Medicine in 1917 and was a member of the Academy of Medicine; American Psychoanalytic Association; American Psychiatric Association; Diplomate American Board of Psychiatry and Neurology; New York County Medical Society; Medical Society of the State of New York.

Joseph F. Painton, M.D., of Williamsville, died October 8, 1982 at the age of 79. He graduated from the University of Buffalo School of Medicine in 1927 and was a member of the Academy of Medicine; New York State Society of Internal Medicine; Fellow American College of Physicians; Diplomate American Board of Internal Medicine; Medical Society of the County of Erie; Medical Society of the State of New York.

E. Clifford Place, M.D., of Jupiter, Florida, died June 8, 1982 at the age of 90. He graduated from the New York University College of Medicine in 1907. He was a member of the Medical Society of the County of Kings; Medical Society of the State of New York.

Thomas F. Prestel, M.D., of Williamsville, died September 28, 1982 at the age of 68. He graduated from the University of Buffalo School of Medicine in 1940 and was a member of the Medical Society of the County of Erie and the Medical Society of the State of New York.

Henry K. Reed, M.D., of New York City, died September 27, 1982 at the age of 73. He graduated from the Uniwersytet Warszawski Akademie Medyczna, Warsawa in 1934 and a member of the New York County Medical Society and the Medical Society of the State of New York.

Abraham R. Richman, M.D., of Brooklyn, died October 14, 1982 at the age of 79. He graduated from the New York Medical College, Flower and Fifth Avenue Hospitals in 1931. He was a member of the New York Neurological Society; American Psychiatric Association; American Academy of Neurology; Association for Research in Nervous and Mental Disease; Diplomate American Board of Psychiatry and Neurology; Medical Society of the County of Kings; Medical Society of the State of New York.

Alexander Richman, M.D., of New York City, died November 25, 1982 at the age of 72. He graduated from the New York Medical College, Flower and Fifth Avenue Hospitals in 1932 and the Academy of Medicine; New York Academy of Gastroenterology; American Gastroenterological Association; Fellow American College of Gastroenterology; Fellow American College of Physicians; Diplomate American Board of Internal Medicine; New York County Medical Society; Medical Society of the State of New York.

Howard E. Rogers, M.D., of Sebring, Florida, died July 28, 1982 at the age of 86. He graduated from the University of Buffalo School of Medicine in 1925 and was a member of the Medical Society of the County of Erie; Medical Society of the State of New York.

Philip Rosenberg, M.D., of the Bethesda, died April 23, 1982 at the age of 88. He graduated from the State University of New York Upstate Medical Center—Syracuse in 1918. He was a member of the Onondage County Medical Society and the Medical Society of the State of New York.

Joshua Rubinstein, M.D., of Brooklyn, died September 30, 1982 at the age of 75. He graduated from the Long Island College of Medicine in 1932 and his memberships include the International Society of Hematology; American Society of Clinical Pathologists; International Society of Internal Medicine; Fellow American College of Physicians; Diplomate American Board of Internal Medicine; Medical Society of the County of Kings; Medical Society of the State of New York.

Louis F. Sanman, M.D., of New York City, died September 28, 1982 at the age of 94. He graduated from Columbia University College of Physicians & Surgeons in 1916. He was a member of the Academy of Medicine; Fellow of American College of Surgeons; New York County Medical Society; Medical Society of the State of New York.

Joseph A. Schutz, M.D., of Verona, New Jersey, died September 16, 1982 at the age of 85. He graduated from University of Buffalo School of Medicine in 1928 and a member of the Academy of Medicine; American Academy of Ophthalmology and Otolaryngology; Diplomate American Board of Ophthalmology; Medical Society of the County of Erie; Medical Society of the State of New York.

Rudolph F. Slowik, M.D., of Syracuse, died November 1, 1982 at the age of 61. He graduated from the State University of New York Upstate Medical Center—Syracuse in 1946. He was a member of the American Academy of Family Practice; Onandaga County Medical Society; Medical Society of the State of New York.

Warren Seaman Smith, M.D., of Bluff Point, died on October 30, 1982 at the age of 77. He graduated from the University of Buffalo School of Medicine in 1929 and was a member of the Medical Society of the County of Erie and the Medical Society of the State of New York.

George Szecsey, M.D., of Brooklyn, died November 2, 1981 at the age of 76. He graduated from Eotvos Lorand Tudomanyegyetem Orvostudomany I Fakultas, Budapest in 1931. He was a member of the American Academy of Otolaryngology; Diplomate American Board of Otolaryngology; Medical Society of the County of Kings; Medical Society of the State of New York.

Rubin Wasserman, M.D., of New York City, died August 8, 1982 at the age of 75. He was a 1934 graduate of the Medizinische Fakultat der Universitat, Wien and a member of the New York Cardiological Society; New York County Medical Society; Medical Society of the State of New York.

John Zaslow, M.D., of Sunrise, Florida, died October 3, 1982, at the age of 82. He graduated from the University of Maryland School of Medicine in 1924. He was a member of the Medical Society of the County of Kings and the Medical Society of the State of New York.

Hans A. Zutrauen, M.D., of Rome, died October 24, 1982 at the age of 72. He graduated from the Universitat Bern Medizinische Fakultat in 1937 and was a member of the Academy of Medicine; New York Cardiological Society; Medical Society of the County of Oneida; Medical Society of the State of New York.

(CME Sampler continued from page 361)

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(CME Sampler continued on page 375)

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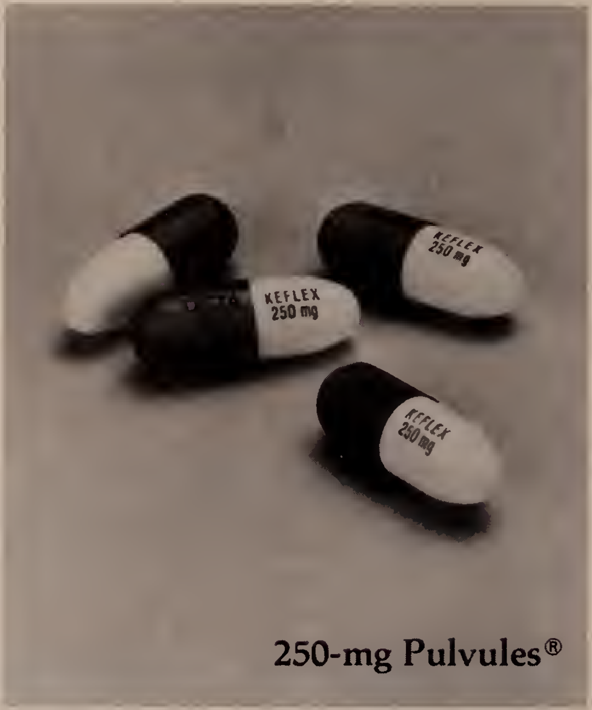

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New York State Journal of Medicine

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March 1983 Volume 83 Number 5

"Dedicated to the continuing education of the physician"

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Published monthly by the Medical Society of the State of New York

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Medical Practice in the Nuclear Age

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Each morning before the meetings begin, registrants will have the opportunity to converse with their colleagues over coffee and Danish—compliments of the Medical Society of the State of New York. There will be Technical Exhibits on display to acquaint the physician with new products and services that will help in providing better medical care. Come join your friends and colleagues in a relaxed setting.

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Medical Society of the State of New York
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FRIDAY, MAY 13

Morning: 9–12 GENERAL SESSION—"MEDICAL IMPLICATIONS OF THE NUCLEAR AGE".

Afternoon:
- Chest Diseases
- Dermatology & Syphilology
- Gastroenterology & Colon & Rectal Surgery/Radiology
- Medical Legal & Workers' Compensation/Occupational Medicine
- Neurology

SATURDAY, MAY 14

Morning:
- Cardiovascular Diseases
- Emergency Medicine/Anesthesiology/Psychiatry/Preventive Medicine/Family Practice
- Internal Medicine/Hand Surgery
- Neurosurgery
- Ophthalmology
- Surgery
- Urology/Radiology

Afternoon:
- Emergency Medicine/Anesthesiology/Psychiatry/Preventive Medicine/Family Practice (*cont'd*)
- Internal Medicine/Hand Surgery (*cont'd*)
- Ophthalmology (*cont'd*)
- Otolaryngology—Head & Neck Surgery
- Medical Liability Mutual Insurance Co. & MSSNY
- Pathology
- School Health/Orthopedic Surgery

SUNDAY, MAY 15

Morning:
- Allergy & Immunology
- Obstetrics & Gynecology/Pediatrics
- Plastic, Reconstructive, and Maxillofacial Surgery
- Physical Medicine & Rehabilitation
- Women's Medical Society of New York State

■

CME CREDITS: Each program will be eligible for CME Catogory 1 credits on an hour-for-hour basis.

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TECHNICAL EXHIBITS

PRELIMINARY PROGRAM
1983 ANNUAL CME ASSEMBLY

MEDICAL SOCIETY OF THE STATE OF NEW YORK

The Rye Town Hilton
Port Chester, New York

May 13 through 15, 1983

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REGISTRATION

Registration is open to MSSNY members and their guests, nonmember physicians, and members of the allied professions. There is no registration fee.

A preregistration form will be found in this issue. For those who preregister, your identification badge and dinner tickets will be held at the MSSNY Registration Desk located in the Grand Ballroom exhibit area. For those who have not preregistered, registration will take place Thursday, May 12 from 4:00 p.m. to 7:00 p.m., Friday and Saturday, May 13 and 14 from 8:00 a.m. to 5:00 p.m., and Sunday, May 15, from 8:00 a.m. to 12:30 p.m. All meetings and exhibits will close at 1:00 p.m. on Sunday.

Identification badges or buttons are required for admittance to all CME meetings and exhibits. It is imperative that each registrant show identification at the registration desk before a badge or button is issued. We ask that you wear your identification at all times while in the meeting and exhibit areas. These measures are taken to ensure that your meeting will be a professional one and not available to anyone who may walk in from the street.

SCIENTIFIC PROGRAM

General Sessions will be held on Friday, May 13, from 9 a.m. to 12:00 Noon and from 1:15 p.m. to 5:00 p.m.; on Saturday, May 14 from 9:00 a.m. to 1:00 p.m. and from 2:00 p.m. to 5:00 p.m.; and on Sunday, May 15, from 9:00 a.m. to 1:00 p.m.

Section meetings will be held on Friday, May 13 from 2:00 p.m. to 5:00 p.m.; on Saturday, May 14, from 9:00 a.m. to 1:00 p.m. and from 2:00 p.m. to 5:00 p.m.; and Sunday, May 15, from 9:00 a.m. to 1:00 p.m.

CME CREDITS

The Medical Society of the State of New York, as an organization accredited for CME, designates this continuing medical education activity as meeting the criteria for the designated number of credit hours in Category 1 of the Physician Recognition Award of the AMA, and/or MSSNY's Method 6.

Each program is acceptable for prescribed or personal interest credits by the American Academy of Family Physicians (AAFP) as designated.

The Medical Society of the State of New York CME credit forms will be issued at the entrance to each meeting room at the opening of each program.

EXHIBITS

Technical Exhibits will be located in the Grand Ballroom. There will be no Scientific Exhibits this year. Exhibits will be on view Friday and Saturday, May 13 and 14, from 8:30 a.m. to 5:00 p.m., and on Sunday, May 15, from 8:30 a.m. to 1:00 p.m.

PHYSICIAN MESSAGE CENTER

Messages for physicians may be left at the Information Desk at the Medical Society registration area. The names of those for whom messages have been received will be posted on a board at the MSSNY registration area in the Grand Ballroom.

SPECIAL EVENTS

Friday, May 13

A RECEPTION sponsored by the Medical Society of the State of New York. Members, spouses, and exhibitors are invited. The Rye Town Hilton Grand Ballroom (exhibit area) from 6:00 p.m. to 7:00 p.m. Your identification badge must be presented at the door.

Saturday, May 14

MSSNY RECEPTION AND DINNER DANCE. All physicians and their guests are invited to attend the Medical Society dinner on Saturday. Richard D. Eberle, M.D., President, Medical Society of the State of New York will be the guest speaker. A reception sponsored by the Medical Society of the State of New York will begin at 7:00 p.m. Dinner will be served at 8:00 p.m. $40.00 per person. Tickets may be ordered on preregistration form.

1983 ANNUAL CME ASSEMBLY

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HERBERT LANSKY, M.D., Eggertsville, Delegate

Pediatrics

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MARTIN C. USHKOW, M.D., Syracuse, Vice-Chairman
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CLOYD KERCHNER, M.D., Glenn Falls, Secretary
PHILIP C. BONANNO, M.D., White Plains, Delegate

Preventive Medicine & Public Health

KATHLEEN GAFFNEY, M.D., Binghamton, Chairman
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DONALD B. THOMAS, M.D., Tonawanda, Secretary
RUSSELL C. JOHNSON, M.D., Goshen, Delegate

Psychiatry

ROBERT CAMPBELL, III, M.D., New York City, Chairman
LEONARD KANE, M.D., Brooklyn, Vice-Chairman
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Radiology

THEODORE ROBINSON, M.D., New York City, Chairman

School Health

MARTIN C. USHKOW, M.D., Syracuse, Chairman
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MARTIN C. USHKOW, M.D., Syracuse, Delegate

Surgery

JOHN J. CREEDON, M.D., Flushing, Chairman
J. RAYMOND HINSHAW, M.D., Rochester, Vice-Chairman
ALFRED F. LUHR, Jr. M.D., Buffalo, Delegate

Urology

IRWIN FRANK, M.D., Rochester, Chairman
PELLIGRINO TOZZO, M.D., New Rochelle, Vice-Chairman
ANDREW McGOWAN, M.D., Rockville Centre, Secretary
IRWIN FRANK, M.D., Rochester, Delegate

- All papers read before the Society become the property of the Society. The original copy of each paper shall be left with the Secretary of the Section.
- Discussers should have their remarks typed and should hand them to the Secretary.
- Section meetings shall begin promptly at the hour specified.
- Executive Session—The first order of business, election of officers. "To participate in the election of any section, a member of the Medical Society of the State of New York must register with such section."

BYLAWS, ARTICLE XII, SECTION I

FRIDAY, MAY 13, 1983

GENERAL SESSION

9:00 A.M.–12:00 NOON

CONTINUING MEDICAL EDUCATION CREDIT: AMA, PRA, 3 Hours, Category 1; AAFP, 3 Hours, Prescribed

MEDICAL IMPLICATIONS OF THE NUCLEAR AGE

JOSEPH V. TERENZIO, J.D., New York City, *Moderator*

President, United Hospital Fund of New York; Adjunct Professor of Public Health, Columbia University College of Physicians and Surgeons

Objective: This session has been planned with the purpose of presenting to physicians the multiple changes in medical practice which are being caused by developments in this nuclear age. Physicians will be alerted to the diagnostic, therapeutic, and social implications of these changes.

9:00 A.M. **Introduction**

STEPHEN NORDLICHT, M.D., New York City

Chairman, Scientific Program Committee

9:10 A.M. **Annihilation, Coincidences and Scintillation: The Application of Nuclear Energy to the Diagnostic Process**

HAROLD L. ATKINS, M.D., Stony Brook

Professor of Radiology and Director of Nuclear Medicine, State University of New York at Stony Brook

9:30 A.M. **Pathogenic Effects of Nuclear Explosions**

KOSTA TSIPIS, Ph.D., Cambridge, Massachusetts

Professor of Physics, Massachusetts Institute of Technology

9:50 A.M. **Medical Problems of Survivors**

HERBERT I. ABRAMS, M.D., Boston, Massachusetts

Phillip H. Cook Professor of Radiology, Harvard Medical School

10:10 A.M. **Discussion**

10:30 A.M. **International Conflict in the Nuclear Age**

STEPHEN NORDLICHT, M.D., New York City

Consulting Psychiatrist, Memorial Sloan-Kettering Cancer Center, Cornell University Medical College

10:50 A.M. **Medical Consequences of Radioactive Exposure**

STUART C. FINCH, M.D., Camden, New Jersey

Professor of Medicine and Chief of Medicine, Cooper Hospital University Medical Center of Rutgers University

11:10 A.M. **Medical Aspects of Nuclear War: Is there a Physician's Role?**

ALEXANDER LEAF, M.D., Boston Massachusetts

Chairman, Department of Preventive Medicine and Clinical Epidemiology, and Ridley Watts Professor of Preventive Medicine, Harvard Medical School

11:30 A.M. **Discussion**

GENERAL SESSION
Occupational Medicine
Medical-Legal & Workers' Compensation Matters

1:15 P.M.–5:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT: AMA, PRA, 3 Hours, Category 1; AAFP, 3½ Hours, Prescribed

OCCUPATIONAL MEDICAL PRACTICE IN THE NUCLEAR AGE

HOWARD R. BROWN, M.D., New York City, *Moderator*

Medical Director, The New York Times; Assistant Professor, Clinical Medicine, New York University Medical Center

Objective: The program's objective is to inform physicians, who practice occupational medicine, of the problems related to claimed radiation exposure secondary to newly developed technology in the nuclear energy and telecommunications industry.

EXECUTIVE SESSIONS

1:15 P.M. **Business Meeting–Occupational Medicine Section**

HOWARD R. BROWN, M.D., New York City

1:25 P.M. **Business Meeting–Medical-Legal & Workers' Compensation Matters Section**

NICHOLAS TERESI, M.D., Albany

(continued)

President, Albany Industrial Physicians;
Instructor in Industrial Medicine, Albany Medical School

1:35 P.M. **Moderator's Introduction**

Howard R. Brown, M.D., New York City

1:45 P.M. **Occupational Injury Claims Arising from Low Level Radiation Exposure**

Victor P. Bond, M.D., Upton

Associate Director for Life Sciences and Safety, Brookhaven National Laboratories;
Professor of Medicine,
State University of New York at Stony Brook

2:15 P.M. **The Problems Associated with Reporting Nuclear Plant Accidents**

Mr. Matthew L. Wald, New York City

Reporter, The New York Times

2:40 P.M. **The Practice of Occupational Medicine in the Telecommunications Industry**

Loring W. Wood, M.D., New York City

Medical Director of Research and Development, New York Telephone Company

3:10 P.M. **Coffee Break to View Exhibits**

3:30 P.M. **Workers' Compensation Aspects of Claimed Radiation Injuries**

Mr. William Kroeger, New York City

Chairman, Workers' Compensation Board, State of New York

4:00 P.M. **Tort Claims of Alleged Radiation Injuries**

Mr. Kreag Donovan, Esq., Rochester

Attorney, Harris, Beach, Wilcox, Rubin & Levey

4:30 P.M. **Panel Discussion**

Neurology

2:00 P.M.–5:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT:
AMA, PRA, 3 Hours, Category 1; AAFP, 3 Hours, Prescribed

HEADACHE

David Green, M.D., Albany, *Moderator*

Clinical Professor, Neurology, Albany Medical College; Assistant, Neurology, St. Peter's Hospital

Objective: Headache as a presenting symptom, its cause and treatment is one of the commonest clinical problems seen by internists and neurologists. The symposium will be devoted to a practical analysis of both the usual and unusual causes of headache. Differential diagnosis and treatment will be emphasized.

EXECUTIVE SESSION

2:00 P.M. **Vascular Headache: Migraine and Cluster Headache Syndromes**

Richard Satran, M.D., Rochester

Professor of Neurology,
University of Rochester School of Medicine and Dentistry

3:00 P.M. **Coffee Break to View Exhibits**

3:15 P.M. **Other Causes of Headache: Diagnosis and Management**

David O. Marsh, M.D., Rochester

Associate Professor of Neurology,
University of Rochester School of Medicine and Dentistry

4:10 P.M. **Headache Caused by Cerebral Hemorrhage, Tumor and Infection**

David Green, M.D., Albany

GENERAL SESSION
Gastroenterology, Colon, and Rectal Surgery
Radiology

2:00 P.M.–5:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT:
AMA, PRA, 3 Hours, Category 1; AAFP, 3 Hours, Prescribed

SOME PEACEFUL USES OF THE ATOM IN GASTROINTESTINAL AND COLORECTAL DISEASES

Peter J. Wilk, M.D., The Bronx, *Moderator*

Assistant Professor of Surgery, Albert Einstein College of Medicine of Yeshiva University

Objective: The purpose of this symposium is to familiarize physicians with the recent advances in gastrointestinal and colorectal diseases which have been made possible by increased knowledge from studies of the atom.

(*continued*)

EXECUTIVE SESSIONS

2:00 P.M. **The Peaceful Use of the Atom: The Role of Nuclear Medicine in the Evaluation of Gastrointestinal Diseases**

LEONARD M. FREEMAN, M.D., The Bronx

Professor of Radiology, Albert Einstein College of Medicine;
Chairman, Division of Nuclear Medicine, Montefiore Hospital and Medical Center

2:30 P.M. **Discussion**

2:40 P.M. **Independent and Adjuvant Radiotherapy for Colorectal Cancers: New Frontiers**

BERNARD ROSWIT, M.D., The Bronx

Chief, Regional Radiotherapy Center, Veterans Administration Hospital;
Professor of Radiotherapy,
Mount Sinai School of Medicine of the City University of New York

3:10 P.M. **Discussion**

3:20 P.M. **Coffee Break to View Exhibits**

3:40 P.M. **Radiotherapy for Colorectal Cancers: The Surgeon's Perspective**

PETER J. WILK, M.D., The Bronx

4:10 P.M. **Discussion**

4:20 P.M. **ANDRESEN MEMORIAL LECTURE: Epidemic Anal Tumors: Opportunistic Infections and Immunoincompetence**

A. W. MARTIN MARINO, JR., M.D., Brooklyn

Clinical Professor of Surgery, State University of New York, Downstate Medical Center;
Director of Colon and Rectal Surgery,
The Brooklyn Hospital and Victory Memorial Hospital

4:50 P.M. **Discussion**

Chest Diseases

Joint Meeting with the New York State Chapter of the American College of Chest Physicians

2:00 P.M.–5:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT:
AMA, PRA, 3 Hours, Category 1; AAFP, 3 Hours, Prescribed

RECENT DEVELOPMENTS IN DISEASES OF THE CHEST

JOHN A. MANZARI, M.D., Johnson City, *Moderator*

Director, Pulmonary Services, United Health Services, Charles S. Wilson Memorial Hospital; Clinical Associate Professor of Medicine, State University of New York Upstate Medical Center, Syracuse

Objective: Physicians will be updated in newer concepts of the diagnosis and treatment of chest diseases.

EXECUTIVE SESSION

2:00 P.M. **Treatment of Carcinoma of the Esophagus with Combined Therapy**

DAVID KELSEN, M.D., New York City

Associate Attending Physician and Solid Tumor Service, Memorial Sloan-Kettering Cancer Center

2:30 P.M. **Computerized Tomography of the Chest**

JOSEPH P. WHALEN, M.D., New York City

Professor and Chairman, Department of Radiology, Cornell University Medical College;
Radiologist and Chief, The New York Hospital, Cornell Medical Center

3:00 P.M. **Heart Lung Transplants**

BARTLEY P. GRIFFITH, M.D., Pittsburgh, Pennsylvania

Assistant Professor of Surgery,
University of Pittsburgh School of Medicine;
Cardiovascular Surgeon,
Presbyterian-University Hospital

3:40 P.M. **Coffee Break to View Exhibits**

4:00 P.M. **High Frequency Positive Pressure Ventilation**

GRAZIANO C. CARLON, M.D., New York City

Clinical Chief, Department of Critical Care,
Memorial Sloan-Kettering Cancer Center;
Associate Clinical Professor of Anesthesia,
Cornell University Medical College

4:30 P.M. **Nuclear Magnetic Resonance**

RAY E. GANGAROSA, M.D., Cleveland, Ohio

Clinical Liaison, Nuclear Magnetic Resonance Imaging, Picker International;
Clinical Associate, Mount Sinai Medical Center, Cleveland, Ohio

(*continued*)

Dermatology and Syphilology
Joint Meeting with the New York State Society of Dermatology

2:00 P.M.–5:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT:
AMA, PRA, 3 Hours, Category 1; AAFP, 3 Hours, Prescribed

NEW TRENDS IN DERMATOLOGY

LEE R. LUMPKIN, M.D., Albany, *Moderator*

Professor and Chairman, Division of Dermatology, Albany Medical College of Union University

Objective: Physicians will be given an insight into new trends in the diagnosis and treatment of skin diseases, with emphasis on the latest methods in treatment modalities.

EXECUTIVE SESSION

2:15 P.M. **New Trends in Acne Therapy**

ALAN R. SHALITA, M.D., Brooklyn

Professor and Chairman, Department of Dermatology, State University of New York Downstate Medical Center

2:50 P.M. **Sclerotherapy of Sunburst Microvaricosities**

EUGENE L. BODIAN, M.D., Great Neck

Clinical Professor of Dermatology, Cornell University Medical College;
Clinical Adjunct Professor of Dermatology, New York University School of Medicine

3:20 P.M. **Coffee Break to View Exhibits**

3:40 P.M. **The Use of Lasers in Skin Surgery**

GARY J. BRAUNER, M.D., New York City

Associate Clinical Professor of Medicine, Albert Einstein College of Medicine of Yeshiva University

4:10 P.M. **Sweet's Syndrome**

PEYTON E. WEARY, M.D., Charlottesville, Virginia

Professor and Chairman, Department of Dermatology, University of Virginia Medical Center

4:40 P.M. **Questions and Discussion**

SATURDAY, MAY 14, 1983

Neurosurgery

9:00 A.M.–12:00 NOON

CONTINUING MEDICAL EDUCATION CREDIT:
AMA, PRA, 3 Hours, Category 1; AAFP, 3 Hours, Prescribed

UPDATE ON NEUROSURGERY

A. JOHN POPP, M.D., Albany, *Moderator*

Associate Professor (Neurosurgery), Albany Medical College; Chief, Neurosurgical Section, Veterans Administration Hospital in Albany

Objective: This program predominantly focuses on new techniques and new technology currently used in clinical neurosurgery

EXECUTIVE SESSION

9:00 A.M. **Computer-Assisted Stereotactic Neurosurgery for Intracranial Tumors**

PATRICK J. KELLY, M.D., Buffalo

Associate Professor (Neurosurgery), State University of New York at Buffalo

9:12 A.M. **A Prospective Study on Microsurgical Removal of Lumbar Discs**

WILLIAM BELL, M.D., New York City

Resident, Neurosurgery, The New York Hospital

Second Discussant and Co-Author:
MICHAEL LAVYNE, M.D., New York City

Assistant Professor of Neurosurgery, The New York Hospital

9:24 A.M. **Surgical Treatment of Medial Hemispheric AVM's (Arterio Venous Malformations)**

BENNETT M. STEIN, M.D., New York City

Byron Stookey Professor of Neurological Surgery, Columbia University College of Physicians and

(*continued*)

Surgeons;
Director of Neurological Surgery, Columbia-Presbyterian Medical Center

9:36 A.M. **Carcinoma of the Choroid Plexus in a Child**

DONALD H. STEWARD, M.D., Syracuse

Clinical Assistant Professor of Neurological Surgery, State University of New York Upstate Medical Center

9:48 A.M. **The Use of Ultrasound in the Diagnosis and Management of Hydrocephalus**

SAMUEL KASOFF, M.D., Valhalla

Assistant Professor of Neurological Surgery, New York Medical College

10:00 A.M. **The Measurement of Skin Temperature by Liquid Crystal Thermography in the Diagnosis of Nerve Root and Nerve Lesions**

SHERWOOD A. JACOBSON, M.D., New York City

Clinical Professor, New York University School of Medicine

10:12 A.M. **Evaluation of New Treatments in Experimental Head Injury: Implications of Observed Sex and Seasonal Differences**

LOUIS R. NELSON, M.D., Albany

Professor and Vice-Chairman of Neurosurgery, Albany Medical College
Second Discussant and Co-Author:
ROBERT S. BOURKE, M.D., Albany
Professor and Chairman, Neurosurgery, Albany Medical College

10:30 A.M. **Coffee Break to View Exhibits**

10:45 A.M. **Recurrent Thoracic Epidural Lipoma**

MIHAI D. DIMANCESCU, M.D., Freeport

Courtesy Staff, Department of Neurosurgery, Nassau Hospital, Mineola; Attending, Department of Neurosurgery, South Nassau Communities Hospital, Oceanside

10:57 A.M. **One Stage-Bilateral Thoracic Cordotomy (Microsurgery Technique) for Malignant Pelvic Pain**

ANTHONY AVELLANOSA, M.D., Buffalo

Associate Chief, Department of Neurosurgery, Roswell Park Memorial Institute;
Associate Professor, Neurosurgery, State University of New York at Buffalo

Second Discussant and Co-Author:

CHARLES R. WEST, M.D., Buffalo

Chief, Neurosurgery, Roswell Park Memorial Institute

11:09 A.M. **Thalamic Stimulation for Treatment of Intractable Pain**

RONALD BRISMAN, M.D., New York City

Assistant Professor of Clinical Neurological Surgery, Columbia-Presbyterian Medical Center

11:21 A.M. **Further Evaluation of the One-Piece Shunting System**

MARTIN H. SAVITZ, M.D., Monsey

Assistant Clinical Professor of Neurological Surgery, Mount Sinai School of Medicine of the City University of New York

11:33 A.M. **Two Year's Experience with Facet Rhizotomy by Radiofrequency Technique**

S. SHELDON KATZ, M.D., Monsey

Clinical Assistant Professor of Neurological Surgery, New York Medical College

11:45 A.M. **Pulmonary Dysfunction in Head Injured Patients**

A. JOHN POPP, M.D., Albany

Cardiovascular Diseases
Jointly Sponsored by
the New York Cardiological Society

9:00 A.M.–1:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT: AMA, PRA, 4 Hours, Category 1; AAFP, 3½ Hours, Prescribed

RECENT ADVANCES IN THE DIAGNOSIS AND MANAGEMENT OF CARDIAC ARRHYTHMIAS AND CORONARY ARTERY DISEASE

MOHAMMAD ZAHIR, M.D., Brooklyn, *Moderator*

Director of Medicine and Chief of Cardiology, Kingsbrook Jewish Medical Center;
Clinical Associate Professor of Medicine, State University of New York Downstate Medical Center

Objective: The participants will be informed of recent developments in major areas of cardiovascular diseases. They will learn about new types of pacemakers and their use as well as the significance and management of ventricular arrhythmias in patients with ischemic heart disease and related disorders. Newer developments in the area of diagnosis and management of coronary artery spasm and the role of high and low density lipoproteins in coronary artery disease will be discussed.

EXECUTIVE SESSION

9:05 A.M. **Physiological Pacemakers: Types and Indications**

DORIS J. W. ESCHER, M.D., The Bronx

Professor of Medicine, Albert Einstein College of Medicine of Yeshiva University;
Head of Cardiac Catheterization Laboratory, Montefiore Hospital and Medical Center

(*continued*)

10:00 A.M. **Diagnosis and Management of Ventricular Arrhythmias in Ischemic Heart Disease**

THOMAS BIGGER, M.D., New York City

Professor of Medicine and Pharmacology, Columbia University College of Physicians and Surgeons

10:35 A.M. **Coffee Break to View Exhibits**

10:50 A.M. **Diagnosis and Management of Coronary Artery Spasm**

MICHAEL HERMAN, M.D., Valhalla

Professor of Medicine, New York Medical College; Chief, Division of Cardiology, Westchester County Medical Center

11:35 A.M. **Relationship of High and Low Density Lipoproteins to Coronary Artery Disease**

ROBERT SCHEIG, M.D., Buffalo

Professor of Medicine, State University of New York at Buffalo;
Head, Department of Medicine, Buffalo General Hospital

12:20 P.M. **Panel Discussion**

The Above Speakers

GENERAL SESSION
Urology
Radiology

9:00 A.M.–1:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT:
AMA, PRA, 4 Hours, Category 1; AAFP, 3½ Hours, Prescribed

UROradiology

IRWIN N. FRANK, M.D., Rochester, *Moderator*

Professor of Urology, University of Rochester School of Medicine and Dentistry; Chairman, Section on Urology, Medical Society of the State of New York

and

THEODORE ROBINSON, M.D., Brooklyn, *Moderator*

Professor of Clinical Medicine, Department of Radiology, State University of New York Downstate Medical Center; Chairman, Section on Radiology, Medical Society of the State of New York

Objective: Our objectives are to further the understanding of new techniques in CT (Computerized Tomography) and Ultrasound that are advancing our diagnostic ability in urinary tract disorders. We will also evaluate and discuss some of the percutaneous interventional techniques, performed by radiologist or urologist, that are increasing our ability to manage the urologic patient, aiding and sometimes even supplanting more conventional surgical procedures.

EXECUTIVE SESSIONS

9:00 A.M. **Introduction**

9:05 A.M. **Specialized Ultrasonic Imaging of the Lower Urinary and Genital Systems**

ROBERT M. LERNER, M.D., Rochester

Assistant Professor of Radiology, University of Rochester School of Medicine and Dentistry

9:50 A.M. **Discussion**

9:55 A.M. **Percutaneous Nephrostomy, Stenting, and Biopsy of the Urinary Tract**

HAROLD MITTY, M.D., New York City

Professor of Radiology, Mount Sinai School of Medicine of the City University of New York

10:40 A.M. **Discussion**

10:50 A.M. **Coffee Break to View Exhibits**

11:10 A.M. **Computed Tomography in the Diagnosis of Pyeloureteral and Peri-ureteral Abnormalities**

ROBERT F. SPATARO, M.D., Rochester

Associate Professor of Radiology, University of Rochester School of Medicine and Dentistry

11:55 A.M. **Discussion**

12:05 P.M. **Endourologic Removal of Stones**

ARTHUR D. SMITH, M.D., New Hyde Park

Chairman, Division of Urology, Long Island Jewish-Hillside Medical Center

12:50 P.M. **Discussion**

(*continued*)

SURGERY

9:00 A.M.–1:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT:
AMA, PRA, 4 Hours, Category 1; AAFP, 3½ Hours, Prescribed

CURRENT CONCEPTS OF BASIC SURGICAL PRINCIPLES

John J. Creedon, M.D., Flushing, *Moderator*
Chairman, Department of Surgery, Flushing Hospital and Medical Center

Objective: Through an exploration of basic surgical principles, physicians will be informed of their various methods of application.

EXECUTIVE SESSION

9:00 A.M. **Common Duct Problems**
Lloyd S. Rogers, M.D., Syracuse
Professor of Surgery, State University of New York Upstate Medical Center

9:45 A.M. **Overview and Evaluation of Potentially Curable Breast Cancers**
Alfred A. Fracchia, M.D., New York City
Attending Surgeon, Breast Service, Memorial Sloan-Kettering Cancer Center

10:30 A.M. **Coffee Break to View Exhibits**

10:45 A.M. **Update on Pancreatic Surgery**
Dana K. Anderson, M.D., Brooklyn
Assistant Professor of Medicine & Surgery, State University of New York Downstate Medical Center

11:30 A.M. **Reconstruction of the Chest Wall with Omental Graft**
A. Addison Barman, M.D., Flushing
Associate Director of Surgery, Flushing Hospital and Medical Center;
Clinical Assistant Professor of Surgery, State University of New York Downstate Mecdical Center

12:15 P.M. **Discussion Period**

GENERAL SESSION
Anesthesiology/Emergency Medicine/Family Practice
Preventive Medicine/Psychiatry

9:00 A.M.–5:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT:
AMA, PRA, 7 Hours, Category 1; AAFP, 6½ Hours, Prescribed

MEDICAL CARE IN THE NUCLEAR AGE

John E. Spoor, M.D., Laurens, *Moderator*
Director, Emergency Services, Aurelia Osborn Fox Memorial Hospital, Oneonta

Objective: There is a need for physicians to be aware of the impact of the nuclear age on patients and the medical profession. This program will present some of the new approaches and considerations in patient evaluation and care that have occurred as a result of our advancement into the nuclear age. The problems of advances being made in both scientific and industrial areas that may result in short- and long-term effects on patients will be presented.

EXECUTIVE SESSIONS

9:10 A.M. **Trauma: The Use of Blood and Blood Products**
Alexander Gotta, M.D., Brooklyn
Associate Professor of Clinical Anesthesia, State University of New York Downstate Medical Center

9:45 A.M. **Reproductive Hazards in the Work Place**
Susan H. Pincus, M.D., Paterson, New Jersey
Assistant Director, Department of Family Practice, St. Joseph's Hospital and Medical Center

10:15 A.M. **Family Medicine in the Nuclear Age: A Peek Into the Future**
Herbert Joyce, M.D., Buffalo
Acting Chairman, Department of Family Medicine, State University of New York at Buffalo

10:45 A.M. **Coffee Break to View Exhibits**

11:00 A.M. **Planning for Nuclear Accidents: The Three Mile Island Experience**
Arnold Muller, M.D., Hershey, Pennsylvania
President, American College of Emergency Physicians; Secretary of Health, State of Pennsylvania

11:30 A.M. **Recognizing Illnesses Related to an Occupational Chemical Exposure**
Jacqueline Messite, M.D., New York City
Regional Program Consultant, National Institute of Occupational Safety and Health

12:00 NOON **Risk Assessment—Establishment of Acceptable Human Exposure Level for Chemicals in our Environment**
Nancy Kim, Ph.D., Albany
Director, Bureau of Toxic Substance Assessment, New York State Health Department

(*continued*)

12:30 P.M. **Discussion**

2:00 P.M.–5:00 P.M.

MEDICAL TECHNOLOGY IN THE NUCLEAR AGE

ROBERT J. CAMPBELL, M.D., New York City, *Moderator*
Director of Psychiatry, Gracie Square Hospital

2:05 P.M. **Newer Applications of EEG to Clinical Psychiatric Practice**

TURAN M. ITIL, M.D., Tarrytown

Research Professor and Director, Division of Biological Psychiatry, New York Medical College

2:50 P.M. **PET (Positron Emission Tomography) Scan Findings in Schizophrenia**

TIBOR FARKAS, M.D., New York City

Senior Scientist, Department of Chemistry, Brookhaven National Laboratories, Upton

3:35 P.M. **Coffee Break to View Exhibits**

3:55 P.M. **Effects of Nuclear Crisis on a New York Population**

MARVIN HERZ, M.D., East Amherst

Professor and Chairman, Department of Psychiatry State University of New York at Buffalo

4:30 P.M. **Discussion**

Internal Medicine
Joint Meeting With
New York Society for Surgery of the Hand

9:00 A.M.–5:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT:
AMA, PRA, 7 Hours, Category 1; AAFP, 6½ Hours, Prescribed

RHEUMATOLOGIC DISORDERS OF THE HAND

WILLIAM H. DERMODY, M.D., Rochester, *Moderator*
Clinical Assistant Professor of Medicine, University of Rochester School of Medicine and Dentistry;
Attending Physician, Highland Hospital

THOMAS J. PALMIERI, M.D., New Hyde Park, *Moderator*
Assistant Professor of Clinical Surgery, State University of New York at Stony Brook; Physician-in-Charge,
Hand Surgery, Long Island Jewish-Hillside Medical Center

Objective: To provide the practicing internist, rheumatologist, orthopedic and plastic surgeon with practical information in the recognition and diagnosis of rheumatologic disorders with special emphasis on the hand and wrist, to acquaint them with the surgical modalities which may be applied to maintain a functional hand and wrist.

EXECUTIVE SESSION

9:00 A.M. **History and Etiology of Arthritis of the Hand and Wrist**

MICHAEL LOCKSHIN, M.D., New York City

Associate Physician and Research Scientist, Hospital for Special Surgery; Consultant, Rheumatology, Memorial Hospital for Cancer and Allied Diseases

9:30 A.M. **Discussion**

9:40 A.M. **Differential Diagnosis of Arthritis of the Hand**

JOHN BAUM, M.D., Rochester

Professor of Medicine and Pediatrics, and Preventive, Family and Rehabilitation Medicine, University of Rochester School of Medicine and Dentistry;
Director, Arthritis and Clinical Immunology Unit, Monroe Community Hospital

10:10 A.M. **Discussion**

10:20 A.M. **Nonsteroidal Agents in the Treatment of Arthritis**

HERBERT S. DIAMOND, M.D., New Hyde Park

Chairman, Department of Medicine, Long Island Jewish-Hillside Medical Center;
Professor of Medicine, School of Medicine, Health Sciences Center, State University of New York at Stony Brook

10:50 A.M. **Discussion**

11:00 A.M. **Coffee Break to View Exhibits**

11:15 A.M. **Long Acting Agents in the Treatment of Arthritis**

ISRAELI JAFFE, M.D., New York City

Professor of Clinical Medicine, Columbia University College of Physicians and Surgeons

11:45 A.M. **Discussion**

(*continued*)

11:55 A.M. **Examination of the Arthritic Hand and Wrist**

S. ASHBY GRANTHAM, M.D., New York City

Clinical Professor of Orthopedic Surgery, Columbia University College of Physicians and Surgeons

12:30 P.M. **Panel Discussion**

2:00 A.M.–5:00 P.M.

2:00 P.M. **Medical and Surgical Treatment of Stenosing and Proliferative Tenosynovitis of the Hand and Wrist**

ROBERT J. SCHULTZ, M.D., Valhalla

Chairman, Department of Orthopedics, New York Medical College

2:20 P.M. **Discussion**

2:30 P.M. **Carpal Tunnel Syndrome and Other Nerve Compressions in Arthritis**

HAROLD DICK, M.D., New York City

Clinical Professor of Orthopedic Surgery, Columbia University College of Physicians and Surgeons

2:50 P.M. **Discussion**

3:00 P.M. **Ulnar Drift and Metacarpophalangeal Joint Replacement**

CHITRANJAN RANAWAT, M.D., New York City

Associate Attending, Orthopedic Surgery, Hospital for Special Surgery;
Attending, Orthopedic Surgery, The New York Hospital

3:20 P.M. **Discussion**

3:30 P.M. **Coffee Break to View Exhibits**

3:45 P.M. **The Wrist in Arthritis: Medical and Surgical Treatment**

MARTIN POSNER, M.D., New York City

Associate Professor of Clinical Surgery, Mount Sinai School of Medicine of the City University of New York

4:05 P.M. **Discussion**

4:15 P.M. **Osteoarthritis of the Wrist and Hand**

RONALD MATCH, M.D., Glen Cove

Assistant Professor, Orthopedic Surgery, Columbia University College of Physicians and Surgeons;
Hand and Orthopedic Surgeon, Glen Cove Community Hospital

4:35 P.M. **Panel Discussion**

OPHTHALMOLOGY

9:00 A.M.–5:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT:
AMA, PRA, 7 Hours, Category 1; AAFP, 6½ Hours, Prescribed

LASERS IN OPHTHALMOLOGY

CHARLES R. BEYRER, M.D., Bay Shore, *Moderator*

Director of Ophthalmology Service, Good Samaritan Hospital, West Islip; Consulting Ophthalmic Surgeon, State University of New York at Stony Brook

Objective: Physicians attending this program will become familiar with the purposes of the various types of lasers in use, including the blue-green laser, the pure argon green laser, the drypton laser, and the yag laser, and the ophthalmological conditions which can be treated by the laser. The importance of proper referral of patients with subretinal neovascularization and macular degeneration will be stressed.

EXECUTIVE SESSION

9:10 A.M. **Ophthalmic Lasers: Instrumentation and Application**

FRANCIS L'ESPERANCE, M.D., New York City

Associate Professor of Clinical Ophthalmology, Columbia University College of Physicians and Surgeons

9:50 A.M. **Krypton Laser Photocoagulation for Retinovascular and Macular Diseases**

LAWRENCE A. YANNUZZI, M.D., New York City

Surgeon Director in Ophthalmology, Manhattan Eye, Ear, and Throat Hospital;
Associate Clinical Professor of Ophthalmology, Cornell Medical School

10:30 A.M. **Coffee Break to View Exhibits**

10:45 A.M. **Laser in Diabetes**

JOSEPH B. WALSH, M.D., The Bronx

Director, Retinal Service, Montefiore Hospital and Medical Center;
Associate Professor of Ophthalmology, Albert Einstein College of Medicine of Yeshiva University

11:25 A.M. **Lasers in Subretinal Neovascularization and Macular Degeneration**

LOUIS V. ANGIOLETTI, M.D., Fort Lee, New Jersey

Director of Retinal Diagnostic Center, New York Eye and Ear Infirmary;
Director of Laser Laboratories, St. Luke's-Roosevelt Hospital Center, Manhattan

12:05 P.M. **Discussion**

1:00 P.M. **Luncheon**

(*continued*)

2:00 P.M.–5:00 P.M.

2:00 P.M. **Argon Laser: Uses in Glaucoma**

RAYMOND HARRISON, M.D., New York City

Attending Surgeon and Director of Glaucoma Service, Manhattan Eye, Ear and Throat Hospital

3:00 P.M. **Coffee Break to View Exhibits**

3:15 P.M. **Cataract Surgery and Microsurgical Techniques Using the Yag Laser**

STEPHEN L. TROKEL, M.D., New York City

Associate Professor of Clinical Ophthalmology, Columbia-Presbyterian Medical Center, Columbia University College of Physicians and Surgeons

4:15 P.M. **Panel Discussion**

GENERAL SESSION
Otolaryngology—Head and Neck Surgery
Pediatrics

2:00 P.M.–5:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT:
AMA, PRA, 3 Hours, Category 1; AAFP, 3 Hours, Prescribed

PEDIATRIC OTOLARYNGOLOGY

ARTHUR HENGERER, M.D., Rochester, *Moderator*

Professor and Chairman, Division of Otolaryngology, University of Rochester School of Medicine and Dentistry

Objective: Attendance at this program will familiarize the practitioner with specific clinical situations commonly seen in children. Emphasis will be placed on problems with the airway.

EXECUTIVE SESSIONS

2:15 P.M. **Pediatric Tracheostomy and Intubation**

JOHN F. STANIEVICH, M.D., Buffalo

Assistant Professor of Otolaryngology, State University of New York at Buffalo School of Medicine

2:40 P.M. **Otitis Media—Pediatric Perspective**

HORACE HODES, M.D., New York City

Distinguished Service Professor of Pediatrics; Herbert Lehman Professor and Chairman Emeritus of Pediatrics, Mount Sinai School of Medicine of the City University of New York

3:05 P.M. **Ethmoiditis in Children**

PETER E. MULBURY, M.D., Rochester

Clinical Associate Professor of Otolaryngology, University of Rochester School of Medicine & Dentistry

3:30 P.M. **Coffee Break to View Exhibits**

3:45 P.M. **Management of Airway Foreign Bodies**

MARSHALL STROME, M.D., Boston, Massachusetts

Associate Professor of Otolaryngology, Harvard Medical School

4:10 P.M. **Laryngeal Papillomatosis**

PETER J. KOLTAI, M.D., Albany

Assistant Professor of Surgery, Division of Otolaryngology, The Albany Medical College

4:35 P.M. **Stridor In Children**

ARTHUR HENGERER, M.D., Rochester

Pathology

2:00 P.M.–5:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT:
AMA, PRA, 3 Hours, Category 1; AAFP, 3 Hours, Prescribed

NEWER APPROACHES TO THE DIAGNOSIS OF INTRATHORACIC TUMORS

THOMAS S. VELZ, M.D., Amsterdam, *Moderator*

Attending Pathologist, St. Mary's Hospital, and Amsterdam Memorial Hospital

Objective: To raise the level of awareness of physicians, both in clinical practice and in pathology, to the current state of techniques available for the diagnosis of intrathoracic tumors. The multispecialty approach will be stressed from the point of view of the primary physician, thoracic surgeon, oncologist, radiologist, and cytopathologist. Special emphasis will be placed upon the technique and interpretation of radiologically directed thin needle biopsies.

EXECUTIVE SESSION

2:00 P.M. **The Role of the Thoracic Surgeon (As Primary Physician) In the Diagnostic Workup of Intrathoracic Tumors**

LOUIS J. BLUMEN, M.D., Albany

Attending, Thoracic Surgery, Memorial Hospital and St. Peter's Hospital

(*continued*)

2:30 P.M. **The Role of the Interventional Radiologist in the Diagnostic Workup of Intrathoracic Tumors**

JOHN D. FULCO, M.D., Schenectady

Chief Radiologist, Sunnyview Hospital and Rehabilitation Center

3:00 P.M. **The Role of the Oncologist in the Diagnostic Workup, and Subsequent Non-Surgical Treatment of Intrathoracic Tumors, An Overview**

ROBERT W. SPONZO, M.D., Troy

Attending Oncologist, Samaritan Hospital and St. Peter's Hospital, Albany

3:30 P.M. **Coffee Break to View Exhibits**

3:45 P.M. **Case Presentations and Discussion of the Pathology and Cytology of Material Obtained for Diagnosis by Thin Needle Biopsy with Radiological Direction**

LOUIS JAKOVIC, M.D., Albany

Head of Laboratories, Memorial Hospital

Second Discussant:
RAYMOND L. HORWITZ, M.D., Albany

Attending Radiologist, Memorial Hospital

4:20 P.M. **Case Presentations and Discussion of the Pathology and Cytology of Material Obtained for Diagnosis by Thin Needle Biopsy with Radiological Direction**

DOMICIAN P. PATACSIL, M.D., Albany

Pathologist-Cytologist, Department of Pathology, Albany Medical Center Hospital

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Medical Liability Mutual Insurance Company
Joint Meeting with the Medical Society of the State of New York

2:00 P.M.–5:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT:
AMA, PRA, 3 Hours, Category 1; AAFP, 3 Hours Prescribed

MEDICAL MISHAPS—LOOK BEFORE YOU WEEP

RALPH M. SCHWARTZ, M.D., New York City, *Moderator*

Associate Attending, Lenox Hill Hospital; Assistant Clinical Professor of Obstetrics and Gynecology, State University of New York Downstate Medical Center

Objective: Through a discussion of the "Doctor-Patient Communication Gap" and other practice pitfalls, physicians will be better equipped to conduct their relations with their patients so as to reduce their exposure to charges of professional liability.

2:00 P.M. **Communication Skills**

RALPH M. SCHWARTZ, M.D., New York City

2:30 P.M. **Pitfalls in the Early Management of the Injured**

JAMES E. BARONE, M.D., New York City

Chief, Surgical Intensive Care Unit, St. Vincent's Hospital and Medical Center; Assistant Professor of Surgery, New York Medical College

3:00 P.M. **Medical Liability and the Surgeon**

ARNOLD H. BELGRAIER, M.D., New York City

Assistant Attending Surgeon, St. Luke's-Roosevelt Hospital Center; Instructor in Clinical Surgery, Columbia University College of Physicians and Surgeons

3:30 P.M. **Coffee Break to View Exhibits**

3:45 P.M. **Sins of Omission and Commission: An Analysis of Closed Cases**

CHARLES BEGG, M.D., Port Washington

Consulting Pathologist, St. Luke's-Roosevelt Hospital Center; Clinical Professor, Emeritus, Columbia University College of Physicians and Surgeons

4:15 P.M. **Medical Liability: The Other World**

DONALD J. FAGER, ESQ., New York City

President, Donald J. Fager & Associates; Assistant Secretary, Board of Directors, Medical Liability Mutual Insurance Company

4:45 P.M. **Panel Discussion**

GENERAL SESSION
Orthopedic Surgery
School Health

2:00 P.M.–5:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT:
AMA, PRA, 3 Hours, Category 1; AAFP, 3 Hours, Prescribed

PEDIATRIC ORTHOPEDICS FOR THE ORTHOPEDIC SURGEON AND PRACTICING PHYSICIAN-SCHOOL PHYSICIAN

(*continued*)

STANLEY HOPPENFELD, M.D., New York City, *Moderator*

Associate Clinical Professor of Orthopedic Surgery, Albert Einstein College of Medicine of Yeshiva University; Chairman, Section on Orthopedic Surgery, Medical Society of the State of New York

Objective: To present the major causes of pediatric orthopedic problems to the orthopedic surgeons, primary physicians and pediatricians as a review, with the objective of improving the diagnosis and evaluation of these conditions.

EXECUTIVE SESSIONS

2:00 P.M. **Hip Problems—Aseptic Necrosis of the Femoral Head and [Legg-Calvé-Perthes], Slipped Capital Femoral Epiphysis As A Cause of Limp in the Child: Diagnosis, Evaluation and Treatment**

RICHARD ULIN, M.D., New York City

Associate, Orthopedic Surgery, Mount Sinai Hospital

2:30 P.M. **Toeing In and Toeing Out**

HERMAN ROBBINS, M.D., New York City

Professor and Director Emeritus, Orthopedic Surgery, Hospital for Joint Diseases and Orthopedic Institute of the Hospital for Joint Diseases

3:00 P.M. **Coffee Break to View Exhibits**

3:30 P.M. **Scoliosis—Concepts and Treatment for the Practicing Physician**

STANLEY HOPPENFELD, M.D., New York City

4:00 P.M. **Leg Length Inequality—Evaluation and Treatment**

HAROLD DICK, M.D., New York City

Attending, Orthopedic Surgery, Presbyterian Hospital

4:30 P.M. **Club Feet—Evaluation and Treatment**

W.B. LEHMANN, M.D., New York City

Director, Pediatric Division of Orthopedics, Hospital for Joint Diseases

SUNDAY, MAY 15, 1983

Physical Medicine and Rehabilitation

9:00 A.M.-1:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT:
AMA, PRA, 4 Hours, Category 1; AAFP, 3½ Hours, Prescribed

CLINICAL APPLICATIONS OF EVOKED POTENTIAL STUDIES

DAVID BROOKS, M.D., New York City, *Moderator*

Director, Medical Affairs, Gouverneur Hospital; Secretary, Section on Physical Medicine and Rehabilitation, Medical Society of the State of New York

Objective: The physician will learn the diagnostic and localizing information that evoked potentials can give. He will become acquainted with the range of suspected diagnoses, that are appropriate to refer for evoked potentials.

EXECUTIVE SESSION

9:00 A.M. **Introduction**

9:10 A.M. **Visual Evoked Potential Clinical Applications**

ANTHONY PORCELLI, M.D., Paterson, New Jersey

Assistant Clinical Professor, Rehabilitation Medicine, Columbia University College of Physicians and Surgeons, New York City; Director, Department of Rehabilitation Medicine, St. Joseph's Hospital, Paterson, New Jersey

9:55 A.M. **Discussion**

10:00 A.M. **Brainstem Auditory Evoked Responses in Neurologic Diagnosis**

ARMINIUS CASSVAN, M.D., East Meadow

Associate Professor, Clinical Rehabilitation Medicine, State University of New York at Stony Brook; Associate Director, Department of Rehabilitation Medicine, Nassau County Medical Center

10:45 A.M. **Discussion**

10:50 A.M. **Coffee Break to View Exhibits**

11:20 A.M. **Monitoring of Spinal Cord Functions During Corrective Surgery**

ERWIN G. GONZALES, M.D., New York City

Assistant Professor, Rehabilitation Medicine, Columbia University College of Physicians and Surgeons

12:05 P.M. **Discussion**

(continued)

12:10 P.M. **Clinical Applications of Somatosensory Evoked Potentials**

KULDIP SACHDEV, M.D., Flushing

Director EEG Lab, Department of Neurology, and Chief, Pediatric Neurology, St. Luke's-Roosevelt Hospital Center

12:55 P.M. **Discussion**

Plastic, Reconstructive and Maxillofacial Surgery

9:00 A.M.-1:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT: AMA, PRA, 4 Hours, Category 1; AAFP, 3½ Hours, Prescribed

MUSCLE AND MYOCUTANEOUS FLAPS: CLINICAL APPLICATIONS

GEORGE P. READING, M.D., Rochester, *Moderator*

Associate Professor, Department of Surgery (Plastic), Strong Memorial Hospital of the University of Rochester School of Medicine and Dentistry

Objective: To emphasize the versatility of muscle and myocutaneous flaps in closing the difficult wound and to demonstrate their wide clinical applications.

EXECUTIVE SESSION

9:00 A.M. **Chest Wall Reconstruction**

JAMES HOEHN, M.D., Albany

Clinical Assistant Professor, Department of Surgery (Plastic), Albany Medical College of Union University

9:30 A.M. **Postmastectomy Reconstruction of the Breast**

ELETHEA H. CALDWELL, M.D., Rochester

Associate Professor, Department of Surgery (Plastic), Strong Memorial Hospital of the University of Rochester School of Medicine and Dentistry

10:00 A.M. **Coverage of Defects of the Head and Neck**

VAHRAM BAKAMJIAN, M.D., Buffalo

Associate Chief, Department of Head, Neck and Reconstructive Surgery, Roswell Park Memorial Institute

10:30 A.M. **Coffee Break to View Exhibits**

10:45 A.M. **Coverage of Upper Extremity Defects**

MARY H. MCGRATH, M.D., New York City

Assistant Professor, Department of Surgery (Plastic), Columbia-Presbyterian Medical Center

11:15 A.M. **Closure of Defects of the Groin, Perineum and Buttock**

ENRIQUE ARMENTA, M.D., Syracuse

Clinical Instructor, Department of Surgery (Plastic), State University of New York Upstate Medical Center

11:45 A.M. **Coverage of Defects of the Lower Extremity and Foot**

GEORGE P. READING, M.D., Rochester

Associate Professor, Department of Surgery (Plastic), Strong Memorial Hospital of the University of Rochester School of Medicine and Dentistry

12:15 P.M. **Panel Discussion**

Allergy and Immunology

9:00 A.M.-1:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT: AMA, PRA, 4 Hours, Category 1; AAFP, 3½ Hours, Prescribed

CUTANEOUS MANIFESTATIONS OF ALLERGIC DISEASE

BERNARD R. FELDMAN, M.D., New York City, *Moderator*

Assistant Professor of Clinical Pediatrics, Columbia University College of Physicians and Surgeons; Associate Director Pediatric Allergy, Columbia-Presbyterian Medical Center

Objective: The diagnosis and management of several allergic/immunologic conditions, whose primary clinical manifestations are dermal, will be reviewed. Newer information regarding the immunology of these challenging clinical problems and current therapeutic approaches will be discussed.

(*continued*)

EXECUTIVE SESSION

9:10 A.M. **The Skin—A Surrogate Thymus?**

RICHARD L. EDELSON, M.D., New York City

Associate Professor of Dermatology, Columbia University College of Physicians and Surgeons

9:45 A.M. **Atopic Dermatitis: Diagnosis and Treatment**

VINCENT BELTRANI, M.D., Poughkeepsie

Assistant Clinical Professor of Dermatology, Columbia University College of Physicians and Surgeons

10:30 A.M. **Coffee Break to View Exhibits**

10:50 A.M. **Urticaria and Angioedema**

ALLAN P. KAPLAN, M.D., Stony Brook

Professor of Medicine; Division Head, Division of Allergy, Rheumatology and Clinical Immunology, Health Sciences Center, State University of New York at Stony Brook

11:20 A.M. **What's New in Contact Dermatitis**

ALEXANDER A. FISHER, M.D., New York City

Clinical Professor, Department of Dermatology, New York University School of Medicine

11:55 A.M. **Drug Photosensitivity of the Delayed Hypersensitivity Type: Clinical and Immunologic Considerations**

LEONARD HARBER, M.D., New York City

Professor and Chairman, Department of Dermatology, Columbia University College of Physicians and Surgeons

12:30 P.M. **Panel Discussion**

GENERAL SESSION
Obstetrics and Gynecology
Pediatrics

9:00 A.M.–1:00 P.M.

CONTINUING MEDICAL EDUCATION CREDIT: AMA, PRA, 4 Hours, Category 1; AAFP, 4 Hours, Prescribed

GENETICS FOR THE OBSTETRICIAN AND PEDIATRICIAN

RICHARD H. SCHWARZ, M.D., Brooklyn, *Moderator*

Professor and Chairman, Department of Obstetrics and Gynecology, State University of New York Downstate Medical Center

Objective: This program is designed to provide practical clinical information concerning four specific topics in the field of genetics. The discussion of teratology will focus on the physician's ability to respond to patients' questions concerning the effect of drugs on the fetus. Another presentation will provide practical guidelines regarding the screening for sickle cell hemoglobinopathy. The third presentation will describe in the clinical perspective the prenatal diagnosis of hemoglobinopathies, utilizing the most modern approaches with restriction enzymes. Finally, the discussion of neural tube defects screening will provide a protocol for the clinician and describe in some detail the results in a large screening program.

EXECUTIVE SESSIONS

9:10 A.M. **Practical Teratology**

MICHAEL T. MENNUTI, M.D., Philadelphia, PA

Associate Professor of Obstetrics and Gynecology, Human Genetics, and Pediatrics, University of Pennsylvania School of Medicine

9:55 A.M. **Prenatal Diagnosis of Sickle Cell Disease**

JAMES R. JONES, M.D., Piscataway, New Jersey
Professor and Chairman, Department of Obstetrics and Gynecology, Rutgers Medical School-College of Medicine and Dentistry of New Jersey

10:40 A.M. **Coffee Break to View Exhibits**

11:00 A.M. DORIS L. WETHERS, New York City, *Moderator*

Attending Physician and Director of Sickle Cell Program, St. Luke's-Roosevelt Hospital Center; Associate Professor of Clinical Pediatrics, Columbia University College of Physicians and Surgeons

11:05 A.M. **Perinatal Screening for Hemoglobinopathy**

KWAME YEBOA, M.D., New York City

Assistant Professor of Pediatrics and Genetics, Columbia University College of Physicians and Surgeons; Administrator, Sickle Cell Program of New York State Genetics Diseases Program

11:50 A.M. **Screening for Neural Tube Defects**

JAMES MACRI, PH.D., Stony Brook

Research Associate Professor of Obstetrics and Gynecology; Director, Neural Tube Defects Laboratory, Health Sciences Center, State University of New York at Stony Brook

12:35 P.M. **Discussion**

ABOUT THE RYE TOWN HILTON

Try to imagine a country manor surrounded by 60 wooded acres. The kind of place that's as beautiful inside as it is outside. The result is a unique comfort and beauty in an unspoiled natural setting. Here are some of the attractions at the Rye Town Hilton.

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SUITES:	$185 and up				

MEDICAL SOCIETY OF THE
STATE OF NEW YORK
1983 CME ASSEMBLY
MAY 13–15, 1983
SUITES ON REQUEST TO HOTEL

☐ CONFIRMATION REQUESTED
If two or more to occupy room, name of joiner(s)

____

If a range of rates is offered and the rate requested is not available, the next available rate will be assigned. Reservation requests must be received no later than April 20, 1983, and will be held until 6:00 p.m. on the date of arrival unless otherwise specified.

If reservations are made by telephone, you must identify the Medical Society meeting for the special rate to apply. Rates subject to applicable sales tax.

RESTAURANTS

Penfield's for gracious dining—an adventure in gourmet food. Also the Tulip Tree for casual meals and buffet in a cheerful setting.

GUEST ROOMS

Each has color TV with AM/FM radio, refrigerator and coffee maker. Rooms are beautifully appointed with large windows overlooking the wooded grounds and gardens.

HOTEL RESERVATIONS

Physicians must make their own hotel reservations no later than April 20, 1983. If making reservations by telephone, please identify the Medical Society meeting for special rate to apply.

AMPLE PARKING

TRANSPORTATION

Convenient regularly scheduled ground transportation is available from LaGuardia and Kennedy Airports. On arrival, go to the baggage claim area and look for Airport Transportation Services free courtesy phone (it's red). From airports, service is throughout the day and evening with departures every hour (½ hour service during peak travel times). Last departure leaves Kennedy at 11:30 p.m. and LaGuardia at 11:45 p.m. Current one-way fare: $11.00; round trip fare: $21.00.

By train from Manhattan (Grand Central Station), take the New Haven line to Rye, New York (about 45 minutes). From the Rye Station, it is a 5 minute taxi ride to the Rye Town Hilton.

FRIDAY RECEPTION

A reception for member physicians, spouses, and exhibitors will be held from 6:00 p.m. to 7:00 p.m. Compliments of the Medical Society of the State of New York.

SATURDAY RECEPTION & DINNER DANCE

All physicians and their guests are invited to attend the Medical Society dinner dance on Saturday, May 14th. MSSNY President, Richard S. Eberle, M.D., will be the guest speaker. A reception sponsored by the Medical Society of the State of New York will

begin at 7:00 p.m. Dinner will be served at 8:00 p.m. $40.00 per person.

MEETING HOURS

Friday, May 13: 9:00 a.m.–5:00 p.m.

Saturday, May 14: 9:00 a.m.–5:00 p.m.

Sunday, May 15: 9:00 a.m.–1:00 p.m.

EXHIBIT HOURS

Friday, May 13: 8:30 a.m.–5:00 p.m.

Saturday, May 14: 8:30 a.m.–5:00 p.m.

Sunday, May 15: 8:30 a.m.–1:00 p.m.

INTERMISSIONS

Coffee & Danish, compliments of MSSNY, will be served each morning from 8:00 a.m. to 8:45 a.m. There will be morning and afternoon intermissions for coffee, and to allow time to visit the exhibits.

REGISTRATION

Registration is open to MSSNY members and their guests, nonmember physicians, medical students, and members of the allied professions. There is no registration fee. Registration hours will be: Thursday, May 12 from 4:00 p.m.–7:00 p.m.; Friday, May 13 from 8:00 a.m.–5:00 p.m.; Saturday, May 14 from 8:00 a.m.–5:00 p.m.; Sunday, May 15 from 8:00 a.m.–12:30 p.m. All meetings and exhibits will close at 1:00 p.m. on Sunday.

PRE-REGISTRATION—Your badge and dinner tickets will be held at the MSSNY Registration Desk in the Grand Ballroom.

PRE-REGISTRATION FORM

1983 Annual CME Assembly, May 13–15
RYE TOWN HILTON

Complete and mail this form to the Medical Society address as indicated below.

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☐ Allied
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Name____
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Note: There is no registration fee.

Saturday Reception & Dinner/Dance________tickets @ $40.00. Total____________

Please make checks payable to: Medical Society of the State of New York, clip and mail to Division of Advertising & Meeting Services, Medical Society of the State of New York, 420 Lakeville Rd., P.O. Box 5404, Lake Success, New York 11042.

TECHNICAL EXHIBITS

GRAND BALLROOM

THE TECHNICAL EXHIBITS will be located in the Grand Ballroom of the Rye Town Hilton. Exhibit hours are 8:30 a.m.–5:00 p.m. on Friday, May 13th and Saturday, May 14th; and from 8:30 a.m. to 1:00 p.m. on Sunday, May 15.

Our exhibitors look forward to the pleasure of meeting and serving members and guests of the Medical Society of the State of New York.

AIS Corporation Basking Ridge, New Jersey	**Booth 2**
Ames Division, Miles Laboratories, Inc. Elkhart, Indiana	**Booth 40**
Ayerst Laboratories New York City	**Booth 14**
Blue Cross/Blue Shield of Greater New York New York City	**Booth 42**
Boots Pharmaceuticals, Inc. Shreveport, Louisiana	**Booth 3**
Bristol Laboratories Syracuse, New York	**Booth 13**
Business Application Systems, Inc. Raleigh, North Carolina	**Booth 32**
Computer-Rad, Inc. Hicksville, New York	**Booth 45**
Data-Med Corporation Wilmington, Delaware	**Booth 10**
Datamedic Corporation Plainview, New York	**Booth 26**
DuPont Pharmaceuticals Wilmington, Delaware	**Booth 33**
Encyclopaedia Britannica Chicago, Illinois	**Booth 31**
Gibraltar Securities Company Florham Park, New Jersey	**Booth 18**
Glaxo, Inc. Ft. Lauderdale, Florida	**Booth 17**
Group Health, Inc. New York City	**Booth 20**
Hoechst-Roussel Pharmaceuticals, Inc. Somerville, New Jersey	**Booth 1**
Hospital Book Service New City, New York	**Booth 22**
Ivac Corporation San Diego, California	**Booth 35**
Lederle Laboratories Wayne, New Jersey	**Booth 28**
Long Island Trust Company Garden City, New York	**Booth 41**
Mast Properties New York City	**Booth 9**
Mead Johnson Nutritional Division Evansville, Indiana	**Booth 43**
Medical Business Services, Div., Blue Cross/Blue Shield of Greater New York New York City	**Booths 36 & 37**
Medical Liability Mutual Insurance Co. Donald J. Fager & Associates, Inc. New York City	**Booth 21**
Medical Plastics Laboratory, Inc. Gatesville, Texas	**Booth 29**
Medico Electronic, Inc. Northfield, Illinois	**Booth 7**
New York State Department of Social Services-Disability Determinations New York City	**Booth 30**
North Shore Numismatics Cold Spring Harbor, New York	**Booth 38**
OCG Technology New York City	**Booth 12**
Pfizer Laboratories New York City	**Booth 25**
Procter & Gamble Cincinnati, Ohio	**Booth 23**
Profesco of Westchester Tarrytown, New York	**Booth 44**
Samuel A. Ramirez & Company, Inc. New York City	**Booth 15**
Roerig New York City	**Booth 8**
Safeguard Business Systems Rutherford, New Jersey	**Booth 19**
Searle Laboratories Chicago, Illinois	**Booth 4**
Security Communications, Inc. Bellerose, New York	**Booth 16**
Charles J. Sellers & Co., Inc. Athol Springs, New York	**Booth 39**
Smith Kline & French Laboratories Philadelphia, Pennsylvania	**Booth 5**
E. R. Squibb & Sons, Inc. Princeton, New Jersey	**Booth 6**
U. S. Air Force Randolf Air Force Base, Texas	**Booth 27**
U. S. Army Medical Department Washington, D.C.	**Booth 11**
U. S. Navy East Meadow, New York	**Booth 34**
USV Laboratories, Inc. Tarrytown, New York	**Booth 24**

DOCTOR . . . come join us
at the CME Assembly

RECEPTION and DINNER DANCE

at the Rye Town Hilton's beautiful Westchester Ballroom

SATURDAY, MAY 14, 1983

The Reception, sponsored by the Medical Society of the State of New York, will be held at 7:00 p.m., and Dinner at 8:00 p.m.

Per Person: $40.00

GUEST SPEAKER:

Richard S. Eberle, M.D., President,
Medical Society of the State of New York

•

There will be gourmet food, wine and beautiful music by Joseph Trongone and his orchestra. Doctor, why not bring your spouse or friend and enjoy a pleasant, Spring weekend at the Rye Town Hilton.

Directions to the Rye Town Hilton

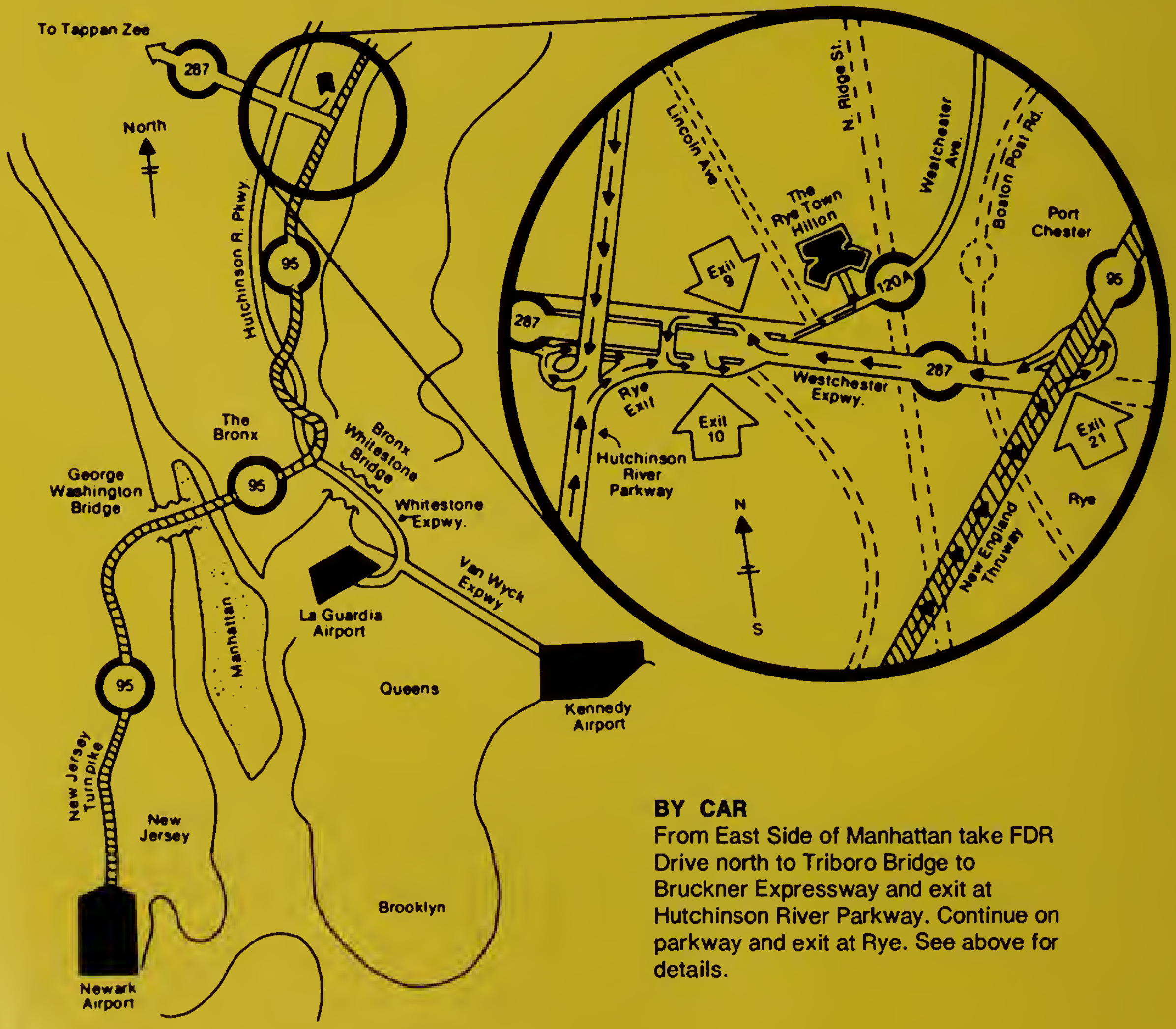
699 Westchester Avenue   Town of Rye   Port Chester, New York

from major New York Metropolitan Airports

FROM LAGUARDIA AIRPORT
Take the Whitestone Expressway over the Bronx-Whitestone Bridge. Follow signs to Hutchinson River Parkway. Proceed on Hutchinson River Parkway to the Rye Exit to Westchester Ave. (120A). Proceed east on Westchester Ave. following signs to Port Chester. Turn left at Rye Town Hilton entrance (at stop light).

FROM KENNEDY AIRPORT
Take Van Wyck Expressway to Whitestone Expressway. Proceed on Whitestone Expressway over the Bronx-Whitestone Bridge. Follow signs to Hutchinson River Parkway. Proceed on Hutchinson River Parkway to the Rye Exit to Westchester Ave. (120A). Proceed east on Westchester Ave., following signs to Port Chester. Turn left at Rye Town Hilton entrance (at stop light).

FROM NEWARK AIRPORT
Take New Jersey Turnpike (95) to the George Washington Bridge. Proceed on U.S. 95 to Cross Westchester Expressway Exit 21. Proceed west on Cross Westchester Expressway (287) to Exit 9. Turn left at first traffic light onto Kennilworth Road. Turn left immediately at second traffic light onto Westchester Ave. (120A). Proceed east on Westchester Ave., following signs to Port Chester. Turn left at Rye Town Hilton entrance (at stop light).



BY CAR
From East Side of Manhattan take FDR Drive north to Triboro Bridge to Bruckner Expressway and exit at Hutchinson River Parkway. Continue on parkway and exit at Rye. See above for details.

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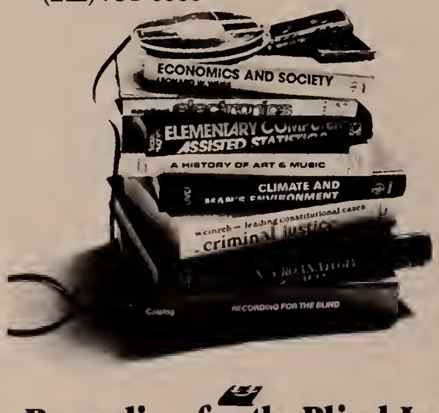
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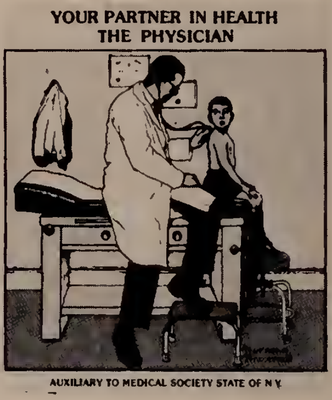
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June 18, 1983

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UPDATE YOUR MEDICINE 1983. June 6–10, 1983. Association of Practicing Physicians of the New York Hospital and Cornell University Medical College. 36 hours Category I credit, a one week review of all subspecialties of internal medicine. 8 major review lectures, 12 workshops, 2 Meet the Professor luncheons, optional practical workshop in breast/pelvic examination. Held at New York Hospital-Cornell, 1300 York Avenue at 69th Street, New York. Dr. Lila Wallis is Course Director. Information: Office of CME, (212) 472-5600.

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PHYSICIANS NEEDED FOR 75 SUMMER children's camps located in the Northeast July and August or a single month. Contact: Association of Independent Camps (M) 157 West 57th Street, New York, N. Y. 10019. (212) 582-3540.

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PSYCHIATRIST SEEKING PHYSICIANS in other specialties to set up holistic medical practice. Reply Dept. 278, c/o NYSJM.

SCHOOL PHYSICIAN. Full time position, plus fringe benefits, 11 months a year starting August 1, 1983. Send resume to: Brentwood Union Free School District, Personnel Office, 3rd Avenue & 4th Street, Brentwood, New York 11717. For any further information please call Dr. Gerald Waldman (516) 435-2222.

WANTED INTERNIST, NASSAU COUNTY, NY Board certified/eligible, with/without subspecialty to join growing private practice. Reply Dept. 277, c/o NYSJM.

MULTI-SPECIALTY GROUP, BINGHAMTON, N.Y., opportunity for Family Practitioner, Internist, Oncologist physicians immediately, and OB-GYN. July, 1983. Guarantees plus incentive, malpractice and fringe benefits. Beautiful suburban area near three hospitals and university. Contact Ronald E. Brown, Business Manager, Chenango Bridge Medical Group, Chenango Bridge Road, Binghamton, N.Y. 13901.

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ORTHOPEDIC OFFICE AND PRACTICE for sale, recently deceased Chief of Orthopedics at leading Ridgewood hospital, office across from hospital, 25 years, excellent practice. Telephone numbers, files, equipment, staffed, good opportunity, reasonable. Call attorney (212) 898-5060.

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PHYSICIAN DESIRES WORK WITH another physician or group, possibility buying into practice. Training 1½ years general surgery, 1 year urology, and 1 year internal medicine. (212) 338-6069 or (212) 381-9210.

WANTED TO BUY: Internal medicine practice in central or northern Westchester County. Reply Dept. 280, c/o NYSJM.

OPHTHALMOLOGIST—Experienced ophthalmic surgeon with cornea-external disease fellowship and Ivy League background. Have practiced general medical and surgical ophthalmology. Seeking association leading to practice, group or purchase in Conn., N.J. or N.Y. area. Timothy Sullivan, M.D., 38 E. Brinkerhoff Ave., Palisades Park, N.J. 07650. (201) 944-3228.

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NEW YORK STATE **APRIL 1983**

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Please send information to the Editor, WHAT GOES ON, 420 Lakeville Road, Lake Success, New York 11042 Telephone 516-488-6100.

Compiled by the Division of Scientific Activities
George J. Lawrence, Jr., M.D., Director
Mrs. Tina Koty, Editor
Philip Keating, Director, Division of Finance

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NEW YORK

Semmelweis Scientific Society
New York Academy of Sciences

2 East 63rd St., New York, NY 10021
April 14, 1983—Thursday—7:30 p.m.
"ACQUIRED IMMUNODEFICIENCY SYNDROME"
Steven Miller, M.D., Anna Shreve, M.D.
Fee: $10 Credit: AMA & AAFP Cat. 1 (2hrs.)
For further information contact Otto C. Kestler, M.D., 515 Madison Ave., NYC 10022.

The New York Academy of Medicine

2 East 103rd Street, NY 10029
April 2, 1983—Saturday—9:00 AM–5:00 PM
SECTION ON OBSTETRICS AND GYNECOLOGY
FEE: $35.00 ($25.00 for Fellows)
CREDIT: AMA Cat. 1 (6 Hrs.)
For further information contact The NY Academy of Medicine, Tel: 212/876-8200, ext. 207.

The Committee on Public Health

April 7 and 8, 1983
SYMPOSIUM ON THE HEALTH ASPECTS OF NUCLEAR POWER PLANT INCIDENTS
CREDIT: AMA Cat. 1
For further information contact The Committee on Public Health, New York Academy of Medicine. Tel: 212/876-8200 ext. 253.

Lenox Hill Hospital

100 East 77th Street, NY 10021
April 8–9, 1983—Friday & Saturday
INFLAMMATORY BOWEL DISEASE
FEE: $200 physicians; $50 medical students & residents
CREDIT: AMA Cat. 1
For further information contact Lauren H. Straub, Media Relations, Lenox Hill Hospital. Tel: 212/794-5181.

Department of Ophthalmology

* Lenox Hill Hospital's Einhorn Auditorium
131 East 76th St., NYC
April 21 & 22, 1983—Thursday & Friday—Begins at 7:30 AM
UVEITIS UPDATE 1983
Robert S. Coles, M.D.
FEE: $200-physicians, $75-residents. CREDIT: AMA Cat. 1 (16 Hrs.)
For further information contact Betty C. Agree, Lenox Hill Hospital, 110 E. 77 St., NYC. Tel: 212/794-4500.

Doctors Hospital

170 East End Avenue, NY 10028
April 7, 1983—Thursday—4:15 PM
CARDIOVASCULAR DISEASES IN CLINICAL PRACTICE PROPHYLAXIS AND MANAGEMENT OF VENTRICULAR ARRYTHYMIAS
J. Thomas Bigger, Jr., M.D.
CREDIT: AMA Cat. 1 (1½ Hrs.)
For further information contact the Secretary of CME, Doctors Hospital. Tel: 212/870-9118.

Columbia University—Harlem Hospital Center Dept. of Rehabilitation Medicine

136th Street & Lenox Avenue, NY 10037
April 9, 1983—Saturday—8:30 AM–4:30 PM
HAND REHABILITATION SEMINAR
For further information contact Dr. Yasoma Challenor, Dept. of Rehab. Med., Harlem Hospital Ctr. Tel: 212/491-1467.

Saint Mary's Hospital of Brooklyn Department of Medicine

170 Buffalo Avenue, Brooklyn 11213
* Third Floor—Board Room
April 6, 1983—Wednesday—8:00 AM–9:00 AM
PROLACTIN
S. D. Mahadevia, M.D.
CREDIT: AMA Cat. 1
April 13, 1983—Wednesday—8:00 AM–9:00 AM
THYROID NODULES
Farida Khan, M.D.
April 20, 1983—Wednesday—8:00 AM–9:00 AM
MANAGEMENT OF INSULIN DEPENDENT DIABETES
Sheldon Bleicher, M.D.
April 27, 1983—Wednesday—8:00 AM–9:00 AM
CURRENT DEVELOPMENTS IN DIABETES MELLITUS
Andrew J. Drexler, M.D.
For further information contact the Department of Medicine at St. Mary's Hospital. Tel: 774-3600 ext. 2044 or 2045.

Institute of Continuing Biomedical Education Chartered by the Regents of the University of the State of NY

426 West 52nd Street, NY 10019
April 19, 1983 to June 25, 1983
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For further information contact Dr. Natale Colosi, Dean. Tel: 212/757-2486.

The Page & William Black Postgraduate School of Medicine of the Mount Sinai School of Medicine (CUNY)

One Gustave L. Levy Place, NYC 10029
* Stern Auditorium, Annenberg Building
April 5, 1983—Tuesday—5:00 PM–6:30 PM
"THE NUCLEAR ARMS RACE AND ARMS CONTROL"
Prof. Kosta Tsipis
April 12, 1983—Tuesday—5:00 PM–6:30 PM
"ECONOMIC ASPECTS OF REVERSING THE ARMS RACE"
Prof. Seymour Melman
April 19, 1983—Tuesday—5:00 PM–6:30 PM
"PSYCHO-SOCIAL ASPECTS OF PREVENTING NUCLEAR WAR"
Prof. Harris Peck
April 26, 1983—Tuesday—5:00 PM–6:30 PM
"CONFLICT RESOLUTION AND TREATY NEGOTIATIONS"
Mr. Paul Warnke
CREDIT: AMA Cat. 1 (6 Hrs.)

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* Mount Sinai Medical Center
April 12, 13, 19, 20, 26 & 27, 1983—Tuesdays & Wednesdays—6:00 PM–9:00 PM
CARDIOPULMONARY RESUSCITATION—INSTRUCTOR COURSE
Douglas Distefano, M.D., James M. Corry, Ph.D.
FEE: $150. CREDIT: AMA Cat. 1 (18 Hrs.)
April 23, 1983—Saturday—9:00 AM–5:00 PM
RECENT ADVANCES IN ANORECTAL SURGERY
Changyul Oh, M.D.
FEE: $100. CREDIT: AMA Cat. 1 (6½ Hrs.)

April 7, 8, 1983—Thursday & Friday—8:30 AM–4:30 PM
PEDIATRIC UPDATE 1983: WHAT'S HAPPENED SINCE YOU COMPLETED YOUR RESIDENCY?
Alexander C. Hyatt, M.D., Michael Weiner, M.D.
FEE: $125 (House Staff-$60). CREDIT: AMA Cat. 1 (13 Hrs.)
April 15, 1983—Friday—9:00 AM–5:00 PM
INTRODUCTION TO THE VITREOUS: BASIC SCIENCE AND CLINICAL CONCEPTS, INCLUDING PARS PLANA VITRECTOMY SURGERY
Keith M. Zinn, M.D.
FEE: $150. CREDIT: AMA Cat. 1 (6½ Hrs.)
April 12, 19, 26 & May 3, 1983—Tuesdays—4:00 PM–5:30 PM
HOW TO WRITE A SCIENTIFIC PAPER
Bette Pesetsky, Medical Writer
CREDIT: AMA Cat. 1 (6 Hrs.)
April 16, 1983—Saturday—9:00 AM–4:00 PM
ORTHOPAEDICS PM 283—THE SATURDAY MORNING GRAND ORTHOPAEDICS SYMPOSIA
Victor H. Frankel, M.D.
CREDIT: AMA Cat. 1
* Union Health Center, New York, NY
April 6, 1983—Wednesday—7:30 AM–9:30 AM
MEDICAL EVALUATION OF PREOPERATIVE PATIENTS
Samuel K. Elster, M.D.
April 13, 1983—Wednesday—7:30 AM–9:30 AM
AUDIOMETRY AND DEAFNESS
Simon C. Parisier, M.D.
CREDIT: AMA Cat. 1 (50 Hrs.)

NYU Medical Center Post-Graduate Medical School

550 First Avenue, NY 10016
* Schwartz Lecture Hall
401 East 30th St., NYC
April 14 to 17, 1983—Thursday through Sunday
CT OF THE SPINE
Norman E. Chase, M.D.
FEE: $425. CREDIT: AMA CAt. 1 (25 Hrs.)
April 18–22, 1983
BOARD REVIEW IN PHYSICAL MEDICINE AND REHABILITATION
April 30–May 1, 1983
REVIEW OF BASIC SCIENCES IN UROLOGY
FEE: $275. CREDIT: AMA Cat. 1 (13½ Hrs.)
* Schwartz Lecture Hall F
April 21–23, 1983—Thursday to Saturday
ADVANCES IN DERMATOLOGY
Irwin M. Freedberg, M.D.
David L. Ramsay, M.D.
FEE: $295. CREDIT: AMA Cat. 1 (17 Hrs.)
For further information contact NYU Post-Graduate Medical School. Tel: 212-340-5295.

SUNY Downstate Medical Center Kings County Hospital Center in cooperation with District 1, NYSSA Department of Anesthesiology

450 Clarkson Avenue, Brooklyn 11203
April 11, 1983—4:00 PM–5:00 PM
VISITING PROFESSOR PROGRAM
PATHOGENESIS & MANAGEMENT OF LUNG/WATER ACCUMULATION
April 12, 1983—5:00 PM–6:00 PM
PHYSIOLOGY & PHARMACOLOGY IN SHOCK THERAPY
Myer H. Rosenthal, M.D.
CREDIT: AMA Cat. 1
For further information contact Abraham I. Raskob, M.D., SUNY Downstate Medical Center. Tel: 212/270-1233.

Albert Einstein College of Medicine of Yeshiva University, Dept. of Surgery

1300 Morris Park Avenue, Bronx 10461
* Van Etten Hospital—Room 523
April 8, 1983—4:00 PM–5:30 PM
ONCOLOGY FOR THE FAMILY PRACTITIONER
MULTIPLE MYELOMA—CASE STUDIES
Dr. B. H. Kaplan
April 22, 1983—4:00 PM–5:30 PM
COMPLICATIONS IN BREAST CANCER
Dr. G. C. Escher
CREDIT: AAFP Cat. 1
For further information contact Margot L. Wulf. Tel: 212/430-2000.

The Jewish Hospital and Medical Center of Brooklyn in association with the American Cancer Society, New York Division, Brooklyn Unit, SUNY, Downstate Medical Center, Sponsored by the Division of Hematology/Oncology

555 Prospect Place, Brooklyn 11238
* B-51 Conference Room, Basement, Leviton Bldg.
April 6, 1983—Wednesday—3:30 PM–4:30 PM
ADVANCES IN HEMATOLOGY AND ONCOLOGY
CARCINOID TUMORS
Jagmohan Kalra, M.D.
April 13, 1983—Wednesday—3:30 PM–4:30 PM
GRANULOCYTIC SARCOMA
David Westring, M.D.
April 20, 1983—Wednesday—3:30 PM–4:30 PM
PRESENT STATUS OF RADIATION THERAPY IN BREAST CANCER
Florence Chu, M.D.
April 27, 1983—Wednesday—3:30 PM–4:30 PM
ULTRASOUND AND CT SCANS IN THE PATIENT WITH CANCER
Elias Kazam, M.D.
CREDIT: AMA Cat. 1
For further information contact the Jewish Hospital and Medical Center of Brooklyn. Tel: 212/240-1211.

New York State Office of Mental Health Kings Park Psychiatric Center

Kings Park, NY 11754
April 6, 1983—10:30 AM–12:00 NOON
PREVENTION OF THE REVOLVING DOOR SYNDROME
J. Kuehnle, M.D.
CREDIT: CME Cat. 1
For further information contact G. V. Laury, M.D., Kings Park Psychiatric Center. Tel: 516/544-2669.

The Ophthalmological Foundation of America, Inc.

823 United Nations Plaza, NY 10017
April 21–23, 1983—Begins Thursday at 5:00 PM
SURGICAL COURSES IN LENS IMPLANTATION
Miles A. Galin, M.D.
For further information contact Mrs. Ruth Green, Admin. Tel: 212/986-4848.

Beth Israel Medical Center Co-Sponsored by The Page & William Black Post-Graduate School of the Mount Sinai School of Medicine, CUNY

10 Nathan D. Perlman Place, New York, NY 10003
* Podell Auditorium
April 6, 1983—Wednesday—8:30 a.m.—12:30 p.m.
"GERIATRIC REHABILITATION"
Drs. Ae-Rie Rim & Bernard Straus
FEE: $25 CREDIT: AMA Cat. 1 (3.5 hrs.)
April 8, 1983—Friday—9:00 a.m.—5:00 p.m.
PEDIATRIC REHABILITATION UPDATE: EQUIPMENT FOR THE HANDICAPPED CHILD
Drs. Joan Gold & Orawan Rongkapan
FEE: $50 CREDIT: AMA Cat. 1 (7 hrs.)
April 15, 16, 1983—Friday & Saturday—9:30 AM-4:30 PM
FAMILY SUPERVISION: PHILADELPHIA STYLE
Dorcas Cofer, Ph.D.
Credit: AMA Cat. 1 (11 Hrs.)
* Podell Auditorium
April 22, 1983—Friday—9:00 AM-4:00 PM
PRINCIPLES OF CARDIAC REHABILITATION
Drs. Judith S. Hertanu & Marvin Berger
FEE: $75.00-Practicing Physicians
37.50-House Staff & Allied Health
CREDIT: AMA Cat. 1 (6 Hrs.)
For further information contact Kathy R. Bonomo, Beth Israel Medical Center. Tel: 212/420-2000.

Memorial Sloan-Kettering Cancer Center

1275 York Avenue, NY 10021
April 18-19, 1983
NUTRITIONAL SUPPORT OF CANCER PATIENTS
For further information contact Charlene Landis, Memorial Sloan-Kettering Cancer Center. Tel: 212/794-6754.

The New York Hospital/Cornell Medical Center Sponsored by the Regional Council for Women in Medicine

525 East 68th Street—Room F-142, NY 10021
April 8, 9, 10, 1983
THIRD REGIONAL CONFERENCE ON WOMEN IN MEDICINE
WOMEN IN MEDICINE: MAKING A DIFFERENCE
For further information contact Women in Medicine, Office of Continuing Professional Education, Montefiore Hospital and Medical Center. Tel: 212/920-6676.

Kings County Medical Society

1313 Bedford Avenue, Bklyn. 11216
April 17, 1983—Sunday—8:30 AM
COMMON PSYCHIATRIC PROBLEMS IN MEDICAL PRACTICE
CREDIT: AMA Cat. 1 (5 hrs.) & AAFP
For further information contact Doris Graber, CME Dept., Kings County Medical Society, Tel: 212/467-9000.

ROCHESTER

The University of Rochester Medical Center School of Medicine & Dentistry

601 Elmwood Ave., Rochester, NY 14642
* The Genesee Plaza Holiday Inn, Rochester
April 28 & 29, 1983
UPDATE IN CRITICAL CARE
Fee: $145.00
For further information contact Office of Continuing Professional Education, Univ. of Rochester Medical Center, Tel: 716/275-4392.

QUEENS

Long Island Jewish-Hillside Medical Center/Queens Hospital Center Affiliation and the Health Sciences Center SUNY at Stony Brook Department of Medicine

New Hyde Park, NY
* Nursing School Auditorium—Queens Hospital Center
82-68 164th Street, Jamaica, NY
April 6, 1983—Wednesday—11:00 AM-12:00 NOON
DECISION POINTS IN RHEUMATOID ARTHRITIS—GRAND ROUNDS
Stephen Kaplan, M.D.
April 13, 1983—Wednesday—11:00 AM-12:00 NOON
USE OF MONOCLONAL ANTIBODIES TO DEFINE HUMAN TUMOR ANTIGENS—GRAND ROUNDS
Richard Beresford, M.D.
April 20, 1983—Wednesday—11:00 AM-12:00 NOON
PANCREATITIS—GRAND ROUNDS
Simmy Bank, M.D.
April 27, 1983—Wednesday—11:00 AM-12:00 NOON
MALIGNANT HYPERTENSION AND NEPHROSCLEROSIS—GRAND ROUNDS
Joseph Littieri, M.D.
For further information contact Herbert Diamond, M.D., Dept. of Medicine, L.I.J., New Hyde Park, NY.

Flushing Hospital and Medical Center

4500 Parsons Blvd., Flushing 11355
April 17, 1983—Sunday—9:00 AM-1:00 PM
SECOND ANNUAL REVIEW IN INTERNAL MEDICINE
INFECTIOUS DISEASES
James Rahal, M.D.
FEE: Per session: $50.00 FH&MC Staff Members
$60.00 Non-Staff Members
CREDIT: AMA Cat. 1

Department of Medicine
April 12, 1983—Tuesday—10:30 AM-12:00 NOON
GRAND ROUNDS—MANAGEMENT OF HEART DISEASE IN THE ELDERLY
Joseph T. Doyle, M.D.
April 19, 1983—Tuesday—10:30 AM-12:00 NOON
GRAND ROUNDS—DISORDERS OF THE RED CELLS: AN OVERVIEW
Ernst Jaffe, M.D.
April 26, 1983—Tuesday—10:30 AM-12:00 NOON
GRAND ROUNDS—LEGIONNAIRE'S DISEASE—CASE PRESENTATION
Herbert Tanowitz, M.D.
For further information contact Luisa T. Gonzalez, Flushing Hospital & Medical Ctr. Tel: 212/670-5741.

American Cancer Society Queens Division

111-15 Queens Blvd. Forest Hills 11375
* Terrace on the Park, Flushing Meadows, NY.
April 16, 1983 at 8:30 AM
LUNG CANCER: HORIZONS IN MANAGEMENT
CREDIT: AMA Cat. 1 FEE: $10
For further information contact Susan Ellman at 212/263-2224.

Peninsula Hospital Center under the Auspices of Downstate Medical Center, Co-Sponsored by the Academy of Medicine, County of Queens

51-15 Beach Channel Drive
Far Rockaway, NY 11691
* Perlberg Auditorium
April 10, 1983—Sunday—9:00 AM-12:00 NOON
LIVER DISEASE
Baroukh Kodsi, M.D.
CREDIT: AMA Cat. 1 & AAFP

For further information contact Edward H. Davis, M.D., Peninsula Hospital Center. Tel: 212/945-7100, ext. 377.

The Jamaica Hospital

89th Avenue & Van Wyck Expressway,
Jamaica 11418

- Community Room

April 14, 1983—Thursday—8:30 AM–9:30 AM
CARDIOLOGY—CURRENT CONCEPTS IN THE USE OF ECHOCARDIOGRAPHY IN THE DIAGNOSIS AND MANAGEMENT OF INFECTIOUS ENDOCARDITIS
Joel Strom, M.D.

April 28, 1983—Thursday—8:30 AM–9:30 AM
CARDIAC PROBLEMS IN CHRONIC DIALYSIS PATIENTS
Martin Neff, M.D.

- Trump Pavilion

April 20, 1983—Wednesday—9:00 AM–10:30 AM
ATYPICAL HYPERTENSION
Stanley E. Gitlow, M.D.

- Community Room

April 5, 1983—Tuesday—8:30 AM–9:30 AM
ENDOCRINOLOGY & METABOLISM
PITUITARY DYSFUNCTION
Amar Jit Singh, M.D.

- Assembly Room

April 8, 1983—Friday—12:30 PM
BONE PATTERNS IN METABOLIC & MALIGNANT DISEASE
Theodore Robinson, M.D.

- Community Room

April 8, 1983—Friday—8:30 AM–9:30 AM
MEDICAL GASTROENTEROLOGY
MANAGEMENT OF PORTAL HYPERTENSION
David Zimmon, M.D.

April 22, 1983—Friday—8:30 AM–9:30 AM
PATHOGENESIS AND MANAGEMENT OF DIVERTICULITIS
W. John B. Hodgson, M.D.

April 29, 1983—Friday—8:30 AM–9:30 AM
SEQUENTIAL REVIEW OF LIVER HISTOPATHOLOGY, PART IV
Elizabeth Khayat, M.D.

April 12, 1983—Tuesday—8:30 AM–9:30 AM
HEMATOLOGY
VON WILLEBRAND'S DISEASE
Mary T. Ti, M.D.

April 7, 1983—Thursday—8:30 AM–9:30 AM
INFECTIOUS DISEASES
ENTERIC DISEASES
Robert H. Lapin, M.D.

- Trump Pavilion

April 6, 1983—Wednesday—9:00 AM–10:30 AM
MEDICAL GRAND ROUNDS & PROGRESS IN MEDICINE
PROSTAGLANDINS—PATHOPHYSIOLOGY
Peter Barland, M.D.

April 13, 1983—Wednesday—9:00 AM–10:30 AM
METABOLIC ENCEPHALOPATHIES
Fred Plum, M.D.

April 27, 1983—Wednesday—9:00 AM–10:30 AM
UPDATE-ACUTE RENAL FAILURE
Jerome G. Porush, M.D.

- Community Room

April 26, 1983—Tuesday—8:30 AM–9:30 AM
NEPHROLOGY
GLOMERULONEPHRITIS: AN UPDATE
Amarjit Singh, M.D.

April 19, 1983—Tuesday—8:30 AM–9:30 AM
NEUROLOGY
DEGENERATIVE DISEASES
Charles Huey, M.D.

April 15, 1983—Friday—8:30 AM–9:30 AM
ONCOLOGY
BRAIN TUMORS AND THEIR TREATMENT
Michael Lavyne, M.D.

- Assembly Room

April 29, 1983—Friday—12:30 PM–1:30 PM
PATHOLOGY GRAND ROUNDS
PATHOLOGY OF FUNGAL INFECTIONS
Christine Honig, M.D.

April 18, 1983—Monday—12:30 PM–1:30 PM
PSYCHIATRY—MEDICAL INTERVIEWS & OTHER PATIENT/PHYSICIAN INTERACTIONS
Irving Farber, M.D.

April 25, 1983—Monday—12:30 PM–1:30 PM
MARITAL AND FAMILY PROBLEMS IN MEDICAL PRACTICE
Henry Greenbaum, M.D.

April 4, 1983—Monday
UROLOGY
URINARY TRACT OBSTRUCTION
Paul J. Cutrofello, M.D.

April 11, 1983—Monday
EMERGENCY ROOM UROLOGY
Paul J. Cutrofello, M.D.

- Community Room

April 21, 1983—Thursday—8:30 AM–9:30 AM
SCLERODERMA
Jane E. Salmon, M.D.
For further information contact The Jamaica Hospital, Jamaica, NY. Tel: 212/657-1800.

Long Island Jewish-Hillside Medical Center/ Queens Hospital Center Affiliation Department of Psychiatry

82-68 164th Street, Jamaica 11432

- School of Nursing, Queens Hospital Center

April 8, 1983—Friday—11:00 AM–12:00 NOON
PANIC DISORDER AND AGORAPHOBIA
Jack Gorman, Ph.D.

April 15, 1983—Friday—11:00 AM–12:00 NOON
FOLLOW-UP STUDY OF PATIENTS ADMITTED AFTER A FIRST PSYCHOTIC EPISODE
Charles J. Rabiner, M.D.

April 22, 1983—Friday—11:00 AM–12:00 NOON
THE HOSPITAL COMMUNITY LINK

April 29, 1983—Friday—11:00 AM–12:00 NOON
AIRPORT WANDERING AS A PSYCHOTIC SYMPTOM
Stanley Shapiro, M.D.
CREDIT: AMA Cat. 1
For further information contact Philip E. Levine, M.D., Dept. of Psychiatry, Queens Hospital Center. Tel: 212/990-3551.

NASSAU

Long Island Jewish-Hillside Medical Center The Department of Ophthalmology

New Hyde Park, New York 11042

- The L.I.J. Teaching Center

April 6, 1983—8:00 AM–4:00 PM
VITREOUS SURGERY
Steven Charles, M.D., H. MacKenzie Freeman, M.D., Richard Mackool, M.D.

Sponsored by The Division of Urology, The Department of Surgery

New Hyde Park, NY 11042

- Room E201A,B,C—Teaching Center Auditorium

April 10, 1983—Sunday—8:00 AM–4:30 PM
PEDIATRIC UROLOGY—A REVIEW FOR PEDIATRICIANS
Moneer K. Hanna, M.D.
FEE: $85.00. CREDIT: CME Cat. 1 (7 Hrs.)
For further information contact Ann J. Boehme, Long Island Jewish-Hillside Medical Ctr. Tel: 212/470-2114.

The Page and William Black Postgraduate School of Medicine of the Mount Sinai School of Medicine (CUNY)

One Gustave L. Levy Place, NY 10029
* Long Beach Memorial Hospital
April 12, 1983—Tuesday—4:00 PM-6:00 PM
MOUNT SINAI TEACHING DAYS
DERMATOLOGY FOR NON-DERMATOLOGISTS
Raul Fleischmajer, M.D.
* Franklin General Hospital, Valley Stream, NY
April 20, 1983—Wednesday—1:00 PM-5:00 PM
WHAT'S NEW IN ENDOCRINE DISORDERS?
Donald A. Bergman, M.D., Rhoda H. Cobin, M.D., Terry F. Davies, M.D.
CREDIT: AMA Cat. 1

Nassau County Medical Center, Dept. of Medicine

2201 Hempstead Turnpike, East Meadow 11554
April 7, 1983—Thursday—10:00 AM
THE THIRD ANNUAL MEDICAL GRAND ROUNDS
CURRENT CONCEPTS IN THE MANAGEMENT OF HEADACHE
Alfred C. Bannerman, M.D.
April 14, 1983—Thursday—10:00 AM
MALNUTRITION IN THE HOSPITALIZED PATIENT
William P. Steffee, M.D.
April 21, 1983—Thursday—10:00 AM
ANTIBIOTIC TREATMENT OF ACUTE BRONCHITIS
Sanford Chodosh, M.D.
April 28, 1983—Thursday—10:00 AM
LIPIDS AND MANAGEMENT OF HYPERLIPIDEMIA
Howard A. Eder, M.D.
CREDIT: AMA Cat. 1 & AAFP
For further information contact Ethel A. Ford, CME Coordinator. Tel: 516/542-0123.

April 21 & 22, 1983—9:00 AM-5:00 PM (Both Days)
SEVENTH ANNUAL SYMPOSIUM ON MOTOR DISORDERS
UPDATE IN CLINICAL ELECTROPHYSICS
FEE: $80-Attending Staff $200-Other Attendings
CREDIT: Cat. 1 (12 Hrs.)
For further information contact Arminius Cassvan, M.D. Tel: 516/542-2835.

Nassau Hospital, The Dept. of Medicine

259 First Street, Mineola 11501
* Breed Conference Room
April 13, 1983-June 1, 1983—Wednesday—7:00 PM-10:00 PM
Part II—8 Sessions
SECOND ANNUAL REVIEW COURSE FOR CERTIFICATION IN INTERNAL MEDICINE
PATIENT MANAGEMENT SECTION
CREDIT: AMA Cat. 1
For further information contact Dr. David Mumford, Medical Education Office. Tel: 516/663-2528.

North Shore University Hospital Division of Ophthalmology

300 Community Drive, Manhasset, NY 11030
* Ketcham Boardroom
April 14, 1983—Thursday—8:00 AM
MEDICOLEGAL TOPICS FOR THE OPHTHALMOLOGIST
DAVID COVEY, Esq.
For further information contact North Shore University Hospital, Manhasset, NY 11030.

SUFFOLK COUNTY

State University of New York at Stony Brook Department of Family Medicine

Stony Brook, NY 11794
* Health Sciences Center, Level 2, Lecture Hall 4
April 20-24, 1983—Wednesday to Sunday
NINTH ANNUAL FAMILY MEDICINE UPDATE 1983
FEE: $325; $150 for Residents & Other Health Professionals
CREDIT: AMA Cat. 1 (39 Hrs.)
For further information contact Tamarath K. Yolles, M.D., SUNY at Stony Brook. Tel: 516/444-2094.

Brookhaven Memorial Hospital Medical Center

101 Hospital Road, Patchogue 11772
* 1st Floor Conference Room
April 5, 1983—Tuesday—8:00 AM-9:00 AM
PEDIATRIC CONFERENCES
DYSFUNCTIONAL BLADDER
Moneer Hana, M.D.
April 8, 1983—8:00 AM-9:00 AM
CLINICAL PROBLEMS IN FAMILY MEDICINE
ENDOCRINE, NUTRITION, METABOLIC HOSPITAL DIETS
Carmen Gomaer, R.D.
April 15, 1983—8:00 AM-9:00 AM
MANAGEMENT OF TPN & PREVENTION OF COMPLICATIONS
George L. Blackburn, M.D., Ph.D.
April 22, 1983—8:00 AM-9:00 AM
OSTEOPOROSIS
John Aloia, M.D.
April 29, 1983—8:00 AM-9:00 AM
PARATHYROID DISEASE
Melvin Horwith, M.D.
CREDIT: AMA Cat. 1
For further information contact Dorothy S. Lane, M.D., Brookhaven Memorial Hospital. Tel: 516/654-7795.

WESTCHESTER COUNTY

Blythedale Children's Hospital

95 Bradhurst Avenue, Valhalla, NY 10595
April 16 & 17, 1983
FOOT MANAGEMENT IN C.N.S. DISORDERS, LECTURE & PRACTICUM
FEE: $135
For further information contact Linda Fieback, Blythedale Children's Hospital, Tel: 914/592-7555.

DUTCHESS COUNTY

Harlem Valley Psychiatric Center New York Medical College, Wingdale 12594

April 8, 1983—Friday—10:00 AM-11:30 AM
BASIC APPROACHES TO PSYCHOTHERAPY
INDIVIDUAL PSYCHOTHERAPIES
Hrair Babikian, M.D.
April 15, 1983—Friday—10:00 AM-11:30 AM
FAMILY THERAPY APPROACHES
Leo Berman, M.D.
April 22, 1983—Friday—10:00 AM-11:30 AM
GROUP PSYCHOTHERAPY
Barbara Previto, M.D.
April 29, 1983—Friday—10:00 AM-11:30 AM
CONTEMPORARY ISSUES IN PSYCHIATRY
DRUG ABUSE AND ALCOHOLISM
Gary Andrews, M.D.
For further information contact Beth H. Davies, R.N., M.S., Harlem Valley Psychiatric Center. Tel: 914/832-6611.

SULLIVAN COUNTY

The Page and William Black Postgraduate School of Medicine of the Mount Sinai School of Medicine (CUNY)

One Gustave L. Levy Place, NY 10029
* Community General Hospital of Sullivan County
April 12, 1983—Tuesday—3:00 PM–6:00 PM
MOUNT SINAI TEACHING DAYS
RATIONAL USE OF ANTIBIOTICS
Peter Nicholas, M.D., Stanley R. Yancovitz, M.D.
CREDIT: AMA Cat. 1

LIBERTY

NYUC Resource Center

1515 Broadway, NY 10036
* Grossinger's Hotel, Catskills, Liberty
April 26 to April 29, 1983—Tuesday to Friday
SUBSTANCE ABUSE '83—6th ANNUAL STATEWIDE ABUSE CONFERENCE
For further information contact LaZette McCants. Tel: 212/921-3527.

ALBANY

New York State Department of Health Bureau of Chronic Disease Prevention

Albany, New York
* Quality Inn, Albany
April 20, 21, 22, 1983—Wednesday to Friday
TUMOR REGISTRY TRAINING PROGRAM
For further information contact Marion Jackson. Tel: 518/474-2352.

SYRACUSE

St. Joseph's Hospital Health Center The Family Practice Program, in cooperation with The SUNY, Upstate Medical Center & the Onondaga County Chapter of American Academy of Family Physicians

301 Prospect Avenue, Syracuse 13203
April 25–29, 1983
FOURTEENTH ANNUAL REFRESHER COURSE FOR FAMILY PHYSICIANS
CREDIT: AAFP Cat. 1 (40 Hrs.)
For further information contact William Beals, M.D., Program Director, 301 Prospect Ave., Syracuse, NY 13203.

BUFFALO

State University of New York at Buffalo Sponsored by The Department of Pediatrics, Children's Hospital of Buffalo

219 Bryant Street, Buffalo 14222
* The Executive Resort Hotel, Buffalo, NY
April 23, 1983
"HOW TO AVOID A MALPRACTICE SUIT"
Ralph J. Wynn, M.D., William P. Dillon, M.D.
FEE: $100-Physicians in Practice
$70-Allied Health Professionals
CREDIT: AMA Cat. 1 (20 Hrs.)
For further information contact Rayna Dutton, Children's Hospital of Buffalo. Tel: 716/878-7630/7640.

Roswell Park Memorial Institute Dept. of Health—State of New York

666 Elm Street, Buffalo 14263
April 14, 1983—Thursday
ONCOLOGY SEMINAR SERIES
ROLE OF THE LABORATORY IN MANAGEMENT OF CANCER
Dr. John Fitzpatrick
FEE: $45-Physicians, $15-Residents
For further information contact Gayle Bersani, R.N., Cancer Control Coordinator. Tel: 716/845-4406.

UTICA

St. Luke's Memorial Hospital Center

P.O. Box 479, Utica, NY 13503
April 16, 1983
MEDICAL MANAGEMENT OF OBESITY
Dr. Victor Vertes
For further information contact Irving Cramer, M.D., St. Luke's Memorial Hospital. Tel: 315/798-6000.

OUT-OF-STATE

American Society of Clinical Pathologists

2100 West Harrison Street
CHICAGO, ILLINOIS 60612
February through June—on the second Friday of each month—12:00 NOON
Month of April:
ASCP TELECONFERENCES
MICROBIOLOGY UPDATE
ACUTE LEUKEMIAS AND MYELODYSPLASTIC SYNDROME
LEGAL RAMIFICATIONS OF HEART DISEASE
For further information contact Michael Kelleher, Customer Services Dept. Tel: 312/738-4857.

Educational Resources Associates, Inc. Co-Sponsored by the Division of Nuclear Medicine and Section of Cardiology, MGH, & the American Heart Association's Council on Clinical Cardiology

209 Harvard Street—Suite 500
Brookline, MA 02146
* MASSACHUSETTS GENERAL HOSPITAL, BOSTON, MA
April 22–23, 1983—Friday & Saturday
THE THIRD ADVANCED CARDIOVASCULAR NUCLEAR MEDICINE WORKSHOP
Kenneth A. McKusick, M.D.
FEE: $270. CREDIT: AMA Cat. 1 (12¼ Hrs.)
For further information contact Dr. Kenneth A. McKusick, c/o Educational Resources Associates, P.O. Box 369, Brookline, MA 02146. Tel: 617/738-8859/8861.

Harvard Medical School Department of Psychiatry Massachusetts Mental Health Center

74 Fenwood Road
Boston, MA 02115
* PARKER HOUSE HOTEL, BOSTON, MA
April 7–9, 1983—Thursday to Saturday
"WAKING, SLEEPING, AND DREAMING: PHYSIOLOGY, PSYCHOLOGY, AND PATHOLOGY"

J. Allan Hobson, M.D.
FEE: $275-physicians $200-residents/fellows or non-physicians
CREDIT: AMA Cat. 1 (16 Hrs.)
For further information contact Harvard Medical School, Dept. of Continuing Education, Boston, MA 02115.
Tel: 617/732-1525.

Symposia Medicus

2880 Shadelands Drive—Suite 404
Walnut Creek, CA 94598
* PALO ALTO, CA
April 5-8, 1983
FOURTH ANNUAL CONFERENCE ON CRITICAL CARE TRANSPORT
FEE: $195-Physicians; $175-Nurses
For further information contact Symposia Medicus.
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84 Main Street, Binghamton, NY 13905
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May 13-15, 1983—Friday to Sunday
ANNUAL CONVENTION
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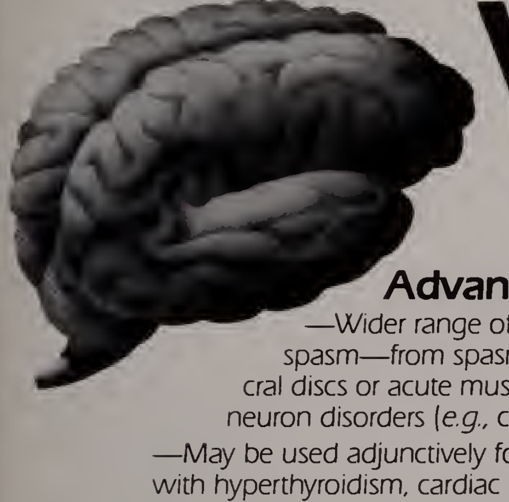

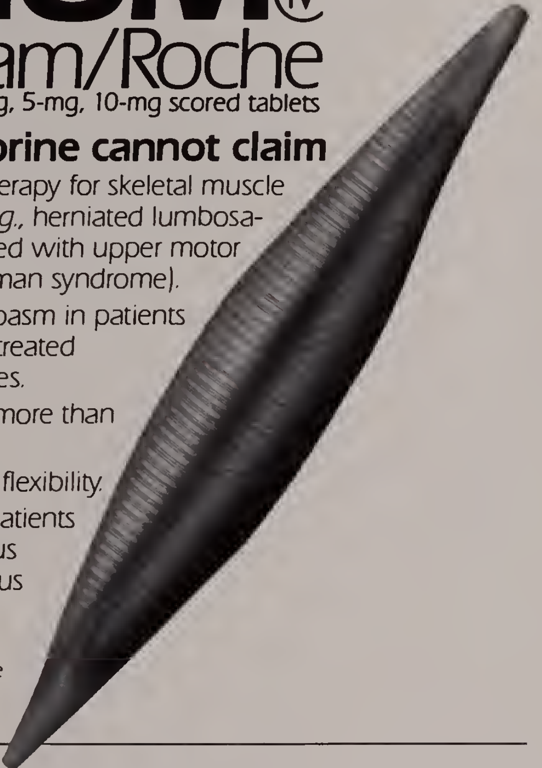

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Medical Society of the State of New York

House of Delegates

Minutes of the Annual Meeting*

November 7 through 10, 1982

The 176th Annual Meeting of the House of Delegates of the Medical Society of the State of New York was convened at the Concord Resort Hotel, Kiamesha Lake, New York, on Sunday, November 7, at 1:20 p.m.; on Tuesday, November 9, at 9:00 a.m.; and on Wednesday, November 10, at 9:00 a.m.; John L. Clowe, M.D., Speaker; William P. Clark, M.D., Vice-Speaker; Victor J. Tofany, M.D., Secretary; Allison B. Landolt, M.D., Assistant Secretary.

OPENING PROCEEDINGS

INVOCATION AND NATIONAL ANTHEM

. . . Speaker Clowe introduced Reverend Robert Bowers of the First Presbyterian Church in Liberty, New York, who gave the invocation. This was followed by the National Anthem . . .

REPORT OF THE REFERENCE COMMITTEE ON CREDENTIALS

. . . William A. Schwarz, M.D., Chairman of the Committee on Credentials, reported that 199 delegates were registered; Secretary Tofany reported that a quorum was present. Speaker Clowe then declared the 176th session of the House of Delegates open for transaction of business . . .

MEMORIAL TRIBUTE

. . . Speaker Clowe read the names of the deceased members of the House of Delegates as follows:

Bronx County: **Manuel F. Kirschtein**, county delegate 1976, 1978, 1979, and 1981.

Broome County: **Raymond Scribner McKeeby**, MSSNY Councilor 1955 to 1963.

Chemung County: **R. Scott Howland**, county delegate 1950 to 1958 and 1963 to 1973.

Erie County: **Stephen Aloysius Graczyk**, county delegate 1951 to 1956.

Jefferson County: **Arnold John Lee**, county delegate 1964.

Kings County: **Harry A. Mackler**, county delegate 1954 to 1961.

Monroe County: **Leonard Horn**, county delegate 1951 to 1953.

New York County: **Linn John Boyd**, county delegate 1944; **Joseph Edward Corr**, county delegate 1953 to 1957; **Harold Bertram Davidson**, county delegate 1940, 1942 to 1950, 1952, 1953, and 1957.

Oneida County: **James Bernard Lawler**, county delegate 1943 and 1944.

Queens County: **Meyeron Coe**, county delegate 1949 to 1957.

Saratoga County: **John Augustine Esposito**, county delegate 1974 and 1975.

. . . The House rose and stood for a moment of silence . . .

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* A verbatim copy of the proceedings of the House of Delegates is on file at the Headquarters of the Medical Society of the State of New York, 420 Lakeville Road, Lake Success, New York 11042.

. . . The following memorial resolutions were presented to the House and were unanimously adopted by the House . . .

Resolution 82-2, Vincent I. Bonafede, M.D.

Introduced by Medical Society of the County of Livingston, Inc.

Whereas, Vincent I. Bonafede, M.D., died on April 7, 1982; and

Whereas, Dr. Bonafede was an esteemed member of the Medical Society of the County of Livingston since January 16, 1934. He served as its President in 1954–55, as President of the Seventh District Branch from 1965 to 1967, and as Delegate to the State Society in 1964 and 1970–75; and

Whereas, He contributed of his time and expertise to many and various civic and charitable organizations; and

Whereas, He made substantial contributions to the body of knowledge within his chosen specialty; therefore be it

Resolved, That the House of Delegates of the Medical Society of the State of New York express its deep sorrow at the passing of Vincent I. Bonafede, M.D.; and be it further

Resolved, That this resolution be published in the minutes of this meeting of the House of Delegates in honor of his memory, and that a copy of this resolution be sent to his family.

Resolution 82-48, David Kershner, M.D.

Introduced by Medical Society of the County of Kings, Inc.

Whereas, David Kershner, M.D., passed away suddenly at his home in Brooklyn on January 25, 1982, in his 84th year; and

Whereas, Dr. Kershner was born in Austria on June 13, 1897, received his undergraduate education at City College of New York and his medical degree from New York University in 1923; and

Whereas, During his 58 years of active practice as a general surgeon in Brooklyn he was attending surgeon at several hospitals, and Director of Surgery of the Kings Highway Hospital and Flatbush General Hospital; and

Whereas, Dr. Kershner was elected to membership in the Medical Society of the County of Kings in 1926, served as its President in 1958–1959, and then Chairman of the Board of Trustees in 1960–1970; and

Whereas, Dr. Kershner was active at the Medical Society of the State of New York where he was elected a member of the Board of Trustees in 1975–1980 and Chairman in 1978–1979, and a county delegate to the MSSNY House of Delegates in 1952–1974 and 1981; and

Whereas, Dr. Kershner received many well-deserved honors during his lifetime, including the Medical Society of the State of New York's Presidential Citation in 1962 for dedicated voluntary services in his community; and

Whereas, Dr. Kershner was deeply respected and admired for his sincerity, honesty, fairness, and wise counsel; and

Whereas, Dr. Kershner was a lovable and kindly man and will be sorely missed by all; therefore be it

Resolved, That this House of Delegates of the Medical Society of the State of New York express its sorrow at the passing of a distinguished physician, a gentleman, and a friend, David Kershner, M.D.; and be it further

Resolved, That this resolution be a part of the proceedings of this House of Delegates and that a copy be sent to his family.

Resolution 82-59, Betty L. Voelker, M.D.

Introduced by Medical Society of the County of Warren

Whereas, Betty L. Voelker, M.D., passed away on August 21, 1982; and

Whereas, Dr. Voelker was a member of the Medical Society of the County of Warren from 1952–1982 and served as its Treasurer from 1967–1977, as its President from 1978–1980, and as a delegate to the MSSNY House of Delegates in 1976, 1978, and 1981; and

Whereas, She was not only a dedicated physician but was a loyal and faithful wife and a mother of seven physicians; therefore be it

Resolved, That this House of Delegates of the Medical Society of the State of New York express its deep sorrow at the passing of Betty L. Voelker, M.D.; and be it further

Resolved, That this resolution be published in the minutes of this meeting of the House of Delegates, and a copy of this resolution be sent to her family as an expression of our deep sympathy and high esteem for Betty L. Voelker, M.D., our distinguished colleague.

Resolution 82-70, J. Richard Burns, J.D.

Introduced by Edward Siegel, M.D., as an Individual

Whereas, J. Richard Burns, J.D., passed away on March 12, 1982; and

Whereas, Mr. Burns came to the Medical Society in September, 1963, when he was appointed as the Assistant Executive Vice-President of the Medical Society of the State of New York, and the Director of the Medical Society's Business Division; and

Whereas, Mr. Burns served as General Counsel to the Medical Society from April, 1973, until his untimely death; and

Whereas, Through the years that he was associated with the Medical Society, Mr. Burns faithfully and diligently performed his duties to the benefit of the Medical Society and the profession as a whole; and

Whereas, He has not only been a dedicated attorney, but was a loyal and faithful husband and father; therefore be it

Resolved, That this House of Delegates of the Medical Society of the State of New York express its deep sorrow at the passing of J. Richard Burns, J.D.; and be it further

Resolved, That this resolution be published in the minutes of this meeting of the House of Delegates, and a copy of this resolution be sent to his family.

Resolution 82-79, Harry H. Moorhead, M.D.

Introduced by Westchester County Medical Society

Whereas, Harry H. Moorhead, M.D., passed away on May 5, 1982; and

Whereas, Harry H. Moorhead, M.D., was a member of the Westchester County Medical Society from 1958–1982 and served as its Chairman of the Public Relations Committee from 1978–1979 and Chairman of its Credentials Committee from 1979–82 and as a Delegate to the Medical Society of the State of New York House of Delegates from 1979–1981; and

Whereas, Dr. Moorhead was not only a dedicated physician and community leader beloved by all, but also a loyal and faithful husband and father; therefore be it

Resolved, That this House of Delegates of the Medical Society of the State of New York express its deep sorrow at the passing of Harry H. Moorhead, M.D.; and be it further

Resolved, That this resolution be published in the minutes of this meeting of the House of Delegates, and a copy of this resolution be sent to his family.

INTRODUCTION OF NEW DELEGATES

. . . Speaker Clowe introduced the following new delegates who were applauded by the House . . .

COUNTY DELEGATES

Uriel Adar, The Bronx
Leslie L. Alexander, Kings
Victorino Anllo, Erie
Robert S. April, New York
Clive D. Caplan, Suffolk
James G. Dahlie, Chautauqua
Richard L. Fenton, Westchester
Theodore C. Gerwig, Jr., Niagara
Louis W. Giordano, Broome
James F. Grant, Oswego
Larry J. Greenberg, Warren
John E. Horn, Yates
Nadene D. Hunter, Livingston
Michael A. Kalvert, Rockland
Ruth R. Knobloch, Cattaraugus
Benjamin E. Lanier, Kings
Norman C. Lyster, Jr., Chenango
Raymond A. Maddocks, Warren
Joseph P. McCormick, Steuben
Theodore R. Poritz, Broome
Howard S. Schwartz, The Bronx
Kenneth T. Steadman, Ontario
Juana Toporovsky, The Bronx
Charles J. Vacanti, Monroe
Donald Wexler, Schenectady
Jerry A. Wider, Suffolk

DISTRICT DELEGATES

Joel E. Mandel, Rockland

SECTION DELEGATES

Ralph Altman, Kings
Peter J. Wilk, The Bronx

MEDICAL SCHOOL DELEGATES

Charles A. Bauda, Erie
Daniel L. Dombroski, Onondaga
Charles M. Plotz, Kings

MEDICAL STUDENT DELEGATES

Mark Levitan, North Woodmere
Robin Tapper, Valhalla

APPROVAL OF THE MINUTES OF THE 1981 MEETING

. . . The minutes of the October, 1981, session were approved as published in the March, 1982, issue (Volume 82, Number 4) of the *New York State Journal of Medicine* with the erratum published on page 1492 in the September, 1982, issue of the New York State Journal of Medicine.

REFERENCE COMMITTEES

Credentials

William A. Schwarz, Richmond, *Chairman*
Ronald C. Bruce, Monroe
George W. Calvosa, Kings
James J. Kropelin, Niagara
A. W. Martin Marino, Jr., Kings

Reports of Officers

President
President-Elect
Secretary
Treasurer
Board of Trustees
Budget and Finance
Executive Vice-President
New York Delegation to the AMA
District Branches
Physicians' Home
Research and Development
Search Committee
Résume of Instructions from the 1981 House of Delegates and Actions Thereon by the Council, Board of Trustees, Executive Committee, Officers, Council Committees, and Governmental Agencies
  Ad Hoc Committee to Review the Job Description and Guidelines for the Appointment of Future Executive Vice-Presidents

David M. Benford, New York, *Chairman*
John W. Abbuhl, Albany
Dattatraya G. Lanjewar, The Bronx
George W. Lewis, Chautauqua
John A. Ramsdell, Westchester

Bylaws

George Lim, Oneida, *Chairman*
Sheppard Arluck, Livingston
Robert M. Kohn, Erie
Allison Landolt, Westchester
Stanley H. Oransky, Rockland

Scientific Activities, Publications, and Miscellaneous

Administrative Committee for the MSSNY Pension Program
American Association of Medical Assistants, New York State Society, Inc., Advisory to
Awards and Prize Essays
Foreign Medical Graduates
General Insurance
Library and Archives
Membership Benefits
Publications

Charles R. Salamone, Monroe, *Chairman*
Ray S. Crampton, Nassau
Stuart I. Orsher, New York
Joseph A. Prezio, Erie
George P. Tilley, Onondaga

Public Health and Education

Accident and Injury Prevention
Aging and Nursing Homes
Alcoholism
Cancer
Child Abuse
Drug Abuse
Emergency Health Services
Environmental Quality
Health Care in Correctional Institutions
Home Health Care and Hospice
Liaison Committee with Nursing
Maternal and Child Health
Medical Aspects of Sports
Mental Health
Metabolic Diseases
Physical Medicine and Rehabilitation
Preventive Medicine
School Health

Continuing Medical Education
Forensic Medicine
Information Technology in Medicine
Medical School Relationships
Physicians' Committee
Scientific Program
Ad Hoc Committee on "Do Not Resuscitate" Orders

Frederick J. Michel, Schoharie, *Chairman*
Robert M. Farrell, Queens
Robert E. Fear, Suffolk
Donna B. O'Hare, New York

Medical Services

Cost Containment
Health Manpower and Rural Medical Service
IPA-HMO
Interspecialty
Medicaid
Medical Care Insurance
Peer Review
PSRO
Workers' Compensation and Occupational Health

Felix R. Rosenhain, Queens, *Chairman*
Edwin I. Cleveland, Westchester
William A. Dolan, Monroe
Richard A. Hughes, Warren
Felix A. Monaco, Nassau

Governmental Affairs and Legal Matters

Ethics
Judicial Council
Federal Legislation
State Legislation
New York State Association of the Professions
Professional Medical Liability Insurance and Defense Board

Seymour R. Stall, Dutchess, *Chairman*
Norman S. Blackman, Kings
James H. Cosgriff, Jr., Erie
* Theodore Marc Mazer
Jerome Weiss, New York

Tellers

James R. Nunn, Erie, *Chairman*
Daniel L. Dombroski, Onondaga
Joseph J. Kaufman, Wayne
Seymour J. Wiener, Orange

Sergeant at Arms

Stephen R. Chernay, Dutchess, *Chairman*
Vashti R. C. Curlin, Kings
Michael N. Lavacca, The Bronx
Norman C. Lyster, Jr., Chenango
Theodore R. Poritz, Broome

REFERRAL OF ANNUAL REPORTS, SUPPLEMENTARY REPORTS, AND RESOLUTIONS

. . . On motion of Secretary Tofany, the annual and supplementary reports of Officers, the Board of Trustees, the New York Delegation to the American Medical Association, District Branches, Council Committees, Standing Committees, and Special Committees, and resolutions that had been printed and distributed to the members of the House were referred to the appropriate reference committees without reading.

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* Medical Student Membership Delegate.

ADDRESSES TO THE HOUSE

*PRESIDENT-ELECT**

Mr. Speaker, members of the House, distinguished guests, ladies and gentlemen:

It is a deeply felt honor for me to stand here today as your incoming President. I am proud of our profession, and thankful for every minute that I've been privileged to be a part of it. I am proud of the Medical Society of the State of New York, what it stands for, and its considerable efforts on behalf of all of us. I am especially proud to be associated with you, who represent the best of medicine in this State. And I am humbly grateful to you for asking me to lead the Medical Society of the State of New York for the next 12 months.

I pledge to you that I will do my best to advance our cause.

I define that cause, first, as the physical and mental well-being of the people of New York State and, secondly, the protection of the right of physicians to practice their art and profession as they wish. As I see it, we cannot have one without the other.

My message this morning is really very short and simple. If we, the medical profession, want to improve our credibility and our image we must concentrate on the patients' needs and the public welfare; if we do that, we will be heard on the social, economic, and legal issues, and we will be listened to. We will be ready to take advantage of our opportunities to resolve those issues on a sound and reasonable basis.

There has been a gradual erosion of our image over the past decade. Whatever the causes are, real or imagined, there is only one way to combat it. That is to prove to our individual patients that we care, and to prove to the public at large that our first concern is the health of all the people of New York State.

Each and every one of us has the opportunity each day to demonstrate our concern for people—a few extra moments to listen, a gentle touch of reassurance, the courtesy, and caring of one human being for another. We must not let our busy schedules make such demands that we don't give people a chance to talk, a chance for them to communicate their very personal fears and anxieties. Any illness carries with it very real threats to the physical and mental stability of the individual patient. Whether we are in a primary care specialty or more remotely involved we each can show this concern and sensitivity.

As a profession, organized as we can be, we can also demonstrate this concern for people by the legislation we support, by our commitment to public health matters with positive, visible programs to educate the public, and by our personal and collective activity in community health affairs both locally and Statewide. Every volunteer organization concerned with health matters should have the benefit of our personal commitment and financial support. We should be heard on issues of public health in the media and in public forums. Our involvement will demonstrate our willingness to be heard, and our sincerity.

There are many areas in our office and hospital responsibilities which can help to change the doctor's image in a positive way. When we serve on a peer review committee, a medical or surgical audit committee, or a grievance committee, we can personally see to it that the public good is foremost. We can personally do our best to guarantee that higher quality ethical medicine is being performed in our area. We must face the responsibility of our colleague who is endangering the public by substandard care, whether he is impaired by alcohol or drugs or whether he has failed to keep abreast of the technical and ever-changing methods of diagnosis and treatment.

We must do all of these things, and more, if we are to have the public's approval and good will. There are no short cuts. Good public relations is earned. It is a byproduct of good practice. Advertising and publicity can only carry our message; they cannot give it substance.

I alluded earlier to our opportunities to resolve the social, economic, and legal issues on a sound basis. There are several matters I should mention in this regard. Dr. Rosenberg referred to these matters earlier this week.

First, and perhaps most important, there has been a coalition effort in the past nine months involving the insurance industry, business groups, and the medical profession to make a concerted, planned, and positive effort at changing the medical liability tort laws. The brightest spot in this effort is that it is being spearheaded by others. The detractors cannot say that the medical profession is trying to feather its own nest. It is a public problem and this coalition involves the public.

On another matter: For the first time that I can remember, the persons responsible for the management of the Medicaid program in New York State have invited the medical community to discuss in detail the shortcomings of the program in every aspect. Representatives of MSSNY will participate in a colloquium on the subject before the New York State Council on Health Care Financing in Albany next week. It is through the efforts of our representatives on several study groups of the Council that this opportunity arises.

Another event has opened the door for MSSNY to carry the ball in Statewide peer review. Because of the passage of the Durenberger bill recently, the State Society may contract with the Federal Government to set up the review mechanism. It becomes obvious that the actual review must be done at the hospital level. But we can assure that physicians supervise and administer that review mechanism on a regional and Statewide basis. This new mechanism will replace the federally funded PSRO program which in many regions of our State was successfully accomplished through the hard work of many of us here in this room. If we can match our efforts in peer review with a well-conducted program for physician discipline using local medical societies or districts as the front line of activity, we will be able to demonstrate to the public that we are indeed able to assure good and appropriate medical care.

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* Dr. Eberle addressed the House on Wednesday morning during the Annual Meeting of the Medical Society of the State of New York.

There is still a reservoir of good will out there for doctors, but we need to bring the level back up to where it was.

From the many committees of the Medical Society of the State of New York, from the commissions and departments that service them, will come the good work this society requires. *You* are those committees, *you* are those commissions. I urge you to bend your efforts to achieve the goals I have outlined. Perhaps then our legislative efforts will bear more fruit. Perhaps then we will be the leaders we know we can be, in our communities and in our State.

. . . The House rose and applauded as Dr. Eberle left the podium . . .

PRESIDENT OF THE AMERICAN MEDICAL ASSOCIATION*

. . . Speaker Clowe introduced William Y. Rial, M.D., President of the American Medical Association, who addressed the House as follows:

Mr. Speaker, President Rosenberg, President-Elect Eberle, guests, and friends. I'm grateful for the opportunity to visit with you today and I will speak to you again about the issue of the Federal Trade Commission. I'm bringing you an urgent request from organized medicine, and all your colleagues around the country, since November 29th is D-day in terms of medicine and the Federal Trade Commission. That's when Congress reconvenes in Washington. Between now and then, or until the Congress approves or disapproves the Federal Trade Commission legislation now before it, the AMA is asking you and our colleagues across the nation to make an "all out" effort to clear up the widespread misunderstanding and misinformation surrounding the Federal Trade Commission's jurisdiction over the learned professions, and particularly the profession of medicine.

Much of the misunderstanding and misinformation, and there is a great deal of it, is being fermented by the Commission itself. We have to do our utmost to counter it before a vote is taken in the Congress, which is our last avenue of appeal.

Last Friday, the Association mailed materials to the Executive Directors and Directors of Communication of all the component and constituent associations in the Federation. We urge you to advise your various headquarter staffs to be on the alert for these materials, which consist of an Op-Ed opinion piece for use in your local newspaper; a list of topical questions, answers and amplifications that can be used for letters to the media or media interviews, for speeches and other outlets; and a call-to-action letter to physicians that can be published in the medical societies' journals, newsletters or perhaps in membership circulars. When you return home from this meeting we hope that you will make the fullest use of these materials.

At the AMA we're practicing what we're asking you to preach; to reinforce our case against Federal Trade Commission jurisdiction. Various AMA officers and trustees will be stating our case to the media across the nation. AMA Trustee James Todd will be addressing the New York City media on November 22nd and 23rd. Other cities in the media tour will be Seattle, Portland, San Francisco, Los Angeles, Salt Lake City, Denver, Dallas, Minneapolis, Detroit, Chicago, Philadelphia, and, of course, Washington, D.C. If you think the AMA is continuing to place the highest possible priority on a favorable vote in the Congress, you're right. To show you why, let's cover some of the major points in our case against the Federal Trade Commission.

First, we have not, are not, and will not seek to exempt ourselves from antitrust laws. In no way do we wish to be above the law, do we feel that we should be above the law or are trying to be above the law. This is nothing more than a "red herring" spread across the path by the Federal Trade Commission. The truth is our profession already is subject to federal, state, and local antitrust activity, and regulatory and oversight authority. The American people have ready access to these systems and have used it in the past. And the systems are working well.

The landmark suits in antitrust cases against the professions were brought either by private individuals or by the United States Department of Justice and have nothing to do with the Federal Trade Commission. The only major action the FTC has brought, in fact, is its action against the AMA, the New Haven County Medical Association and the Connecticut State Medical Society. And even then, the Commission used out-dated information, because we were already in compliance with the advertising rules that the FTC sought to enforce when it filed its suit. So millions of tax dollars have been wasted on what was from the beginning a non-violation.

If the FTC was so concerned about advertising, where were they when this advertisement appeared in the funny pages of the *Philadelphia Bulletin* last October? It looked like a science writer's article of the type that is usually run by the *New York Times Syndicate* or the *Los Angeles Times Syndicate*. Even though it says "advertisement" in small letters across the top of the four columns, the headline read, "National Science Award, Winning Doctor Discovers How You Can Lose Your Excess Body Weight Overnight." The advertisement read: "In a moment you will learn how a new discovery by a national science award winner literally stops calories from entering your body." According to research, this remarkable discovery makes it possible to lose up to 25 pounds or more in the very first week and more than 40 pounds in a month." Even those people who were on a hunger strike in Northern Ireland couldn't lose weight that fast, and they starved themselves to death.

Where was the Federal Trade Commission when this nonsense was being foisted on an unsuspecting public? The advertisement tells you to send for a book which tells you how to buy phenylpropanolamine across the counter. You can see that the Federal Trade Commission doesn't do such a great job in carrying out its charge, which is to monitor national advertising.

In addition, the AMA has been forced to spend five million dollars of its membership dues in legal fees that could have been better spent on improving the quality of health care and the educational process in the United States.

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* Dr. Rial addressed the House at the Tuesday morning session.

This same sad lack of purpose and objectivity is evident in some of the other less sweeping actions taken by the Federal Trade Commission, actions it refers to as successes. The FTC said "Some doctors in Texas were boycotting a hospital." The doctors simply were asking the hospital to stop breaking a Texas law, which proscribed against the corporate practice of medicine. The hospital stopped and that was the end of the case.

Consider the FTC claim that it saved consumers millions of dollars by forcing states to permit advertising for eye examinations and corrective lenses. But, when the agency issued its so-called "eye glass rule," such advertising had already been permitted under decisions by the United States Supreme Court. So, even the highest court in the land said that the FTC ruling was redundant.

Several other examples of Federal Trade Commission futility could be cited, but so much for the taxpayers' money and so much for the FTC's successes.

The Commission's arbitrary and often arrogant behavior has also had a chilling effect on voluntary peer review and quality assurance activity. I asked Senator Heinz, the Senator from my own state of Pennsylvania, about the FTC and cited their action in Maine, regarding the Maine Medical Association. Maine, as you are all well aware, is a pretty small state. In August, the FTC asked for numerous records, which the Maine Medical Association was expected to duplicate and forward to the Federal Trade Commission. The Association asked for an extension of time because this occurred in August when half of their staff was on vacation. An extension of even thirty days to comply with the request was refused by the FTC. In reply to my question, Senator Heinz said, "Well, maybe we ought to pin their ears back a little bit." Well, they need more than their ears pinned back. As I said earlier, this chilling effect on the cost-effectiveness potential of local health care coalitions is liable to affect the ability of such health care coalitions to impact on the quality and the cost of medical care in our local communities, and on the informal mediation of patient or public complaints against physicians by local medical societies. The FTC denies that this has happened, but I suggest to you that, as a consequence, there aren't many grievance committees taking much action in that respect.

In 1976, the FTC threatened to file a five-count complaint against the American Society of Plastic and Reconstructive Surgeons. Among other things it questioned the Society's requirement of Specialty Board Certification as a prerequisite for membership and for being listed as a Plastic Surgeon in the yellow pages. The Society promptly assessed each of its members $750 to raise a legal fund to fight the FTC. In 1978 the Commission dropped the complaint.

The shadow of the FTC could also inhibit the growth of voluntary local health care coalitions. As you know, these coalitions are representative of local medical societies, business, industry, civic organizations, government, consumers and various other groups and corporations. Their purpose is to devise comprehensive programs to address problems related to medical health services with emphasis on the cost-effectiveness of those services. The participation of medical society representatives or individual physicians can be prohibited as constituting price fixing or collusion under the FTC rules. This will certainly have a very chilling effect if the FTC begins to look at those coalitions. Regardless of the cost-effectiveness potential of such activities, the real losers will be our patients, or as the Feds like to call them, "consumers."

Local medical societies are also being inhibited from informally mediating patient and public complaints through grievance committees. In the past, if a patient had a complaint about his physician's fees, and the medical society found the complaint legitimate, it could persuade the physician to reduce the fee appropriately. But, the FTC now has said that only long-term fee practices by physicians can be subject to peer review by local medical societies. Apparently, this means that if a physician's total practice is not evaluated, the patient's complaint about the particular fee cannot be mediated. Of course, there is an alternative of sorts. The patient can write a letter and send it to the FTC's office and hope it wends its way through those 650 or more lawyers and the Washington bureaucracy.

Where were they when the previously mentioned advertisement appeared in the *Philadelphia Bulletin*, and probably your local newspapers? This should explain why numerous opinion surveys have revealed that the public much prefers familiar, effective local channels of regulation and control, as contrasted to the uncertainty of action by a faceless and distant governmental agency. Well, so much for the FTC and public interest.

The best interests of the American people are at the heart of some model legislation that the AMA has drafted, with the approval of our House of Delegates. Basically, this legislation would amend federal and state antitrust statutes to accomplish three purposes; to provide support for private sector activities to maintain and improve the quality of medical health services and to restrain the costs of services in the public interest; to provide that courts, in determining the facts of restraints of trade actions be allowed to consider related criteria, including the best interests of the public; and to provide that private sector activities be directed by the federal or state government precisely because such governmental direction would be exempt from antitrust activity. Incredibly, this model legislation has been interpreted as an AMA attempt to exempt the medical profession and physicians from any or all antitrust laws.

Senator Heinz said to me, "What about those pacemaker scandals?" Well, friends, if you or I are guilty of stealing from the patient in the form of kickbacks or stock options or big cars or whatever it is, we ought to be prosecuted to the full extent of the law. I'm a member of the Board of Pennsylvania Blue Shield, and the problem is that when we refer a case of a doctor who has used the mails to defraud Blue Shield by reporting services that he has not performed the federal attorney doesn't prosecute, unless the physician steals about $20,000. If the federal attorney would prosecute every physician who steals, whether it be 50 cents or 50 dollars, then the example would be set and such prosecution would deter other physicians who might otherwise be tempted.

Our profession would remain subject to the antitrust laws, just as we are now. The courts would not be bound any more than they are now to reach a particular conclusion on any particular restraint of trade action. We simply believe that the application of such statutes and regulatory rules can and should take into account the best interests of the American people, just as we believe the antitrust laws of the various states enacted by the duly elected representatives of the American people should not be preempted by the Federal Trade Commission, whose members are appointed rather than elected. These members serve as judge, jury, and executioner in enforcing FTC rules.

Let me point out that when we were enjoined by the Federal Trade Commission we first had to go before an Administrative Law Judge, who, as an employee of the Federal Trade Commission, ruled in favor of the Commission's attorney. Then we have to appeal the decision of the Administrative Law Judge to the full Commission, the five member appointed Commission, again not elected, but appointed by the President. And what will the five Commissioners do? Most of them are not even experienced in antitrust activity. They're appointed as a part of the patronage process of the federal government. Without expertise, the members of the Commission will be influenced by the ruling of the Administrative Law Judges. Only then, after the Federal Trade Commission has ruled against you, can you appeal through the court system.

Well, that's our case, our strong case against the Federal Trade Commission. We urge you to take that case to the local media and to your representatives in the Congress and ask for approval of the Luken-Lee Amendment now before the House of Representatives and for the defeat of the Broyhill Amendment which would serve to extend the Federal Trade Commission's jurisdiction over the profession. Supporters of the Broyhill Amendment claim that it is a reasonable compromise because it would apply only to the business aspects of medical practice. But, it's not a compromise and it is not reasonable, because you simply cannot separate the business aspects of medicine from the clinical aspects. For example, when a medical staff determines whether or not a physician is qualified for staff privileges, its decision inevitably has a commercial as well as a clinical implication for that physician. At this point in time the FTC says it does not intend to interfere in such decisions. Well, it certainly does.

I'm Chairman of the Standards and Survey Procedures Committee of the Joint Commission on Accreditation of Hospitals, and we're trying to write a new standard for the medical staff, one which says that any patient admitted to the hospital, should be under the care of a physician. The AMA lawyers say we cannot say this for the following reasons: The primary aim should be quality. The Joint Commission is certainly for quality of care and it's practically the only voluntary regulatory agency in existence; criteria must be reasonable and truly objective. We're certainly trying to do that. It isn't for lack of trying. Is the standard more than necessarily restrictive and is there a less restrictive alternative? Is it an excuse for exclusion? This is the real reason why the attorneys are upset, because it has been interpreted as such. The Attorney General of Ohio is suing all of the five parent organizations of the JCAH—the American Medical Association, the American Hospital Association, the American College of Physicians, the American College of Surgeons and the American Dental Association—because of the desire to include clinical psychologists as admitting physicians to hospitals in Ohio.

Will it lessen competition among peer groups? Could it be argued that it protects the M.D. members of the JCAH? Is it necessarily procompetitive? And does it limit consumer choice? Of course it limits the consumer choice if the doctor is not on the staff of that hospital.

At this point in time the FTC says it doesn't intend to interfere, but I think it may interfere. There's not one scintilla of evidence in the entire legislative history of the United States to suggest that the Congress ever intended to have the Federal Trade Commission extend its rule-making authority to the professions. And there is no hard evidence to suggest it should do so now. We're already a well-regulated profession, probably the most regulated profession. Not only because of our own voluntary peer review in our hospitals through the Credentials Committees, through the Tissue Committees, through the Records Committees, through the Audit Committees, Utilization Review Committees, but also because of the federal, state and local, legal and regulatory controls over our profession. So, in asking to be removed from another layer of regulation by the FTC all we're really asking for is reason within regulation and regulation within reason.

Thank you for the opportunity of sharing these concerns with you.

In addition to the above address, Dr. Rial, at the request of the Reference Committee on Medical Services, made the following comments on Resolution 82-77, *Contemplated Definition of Hospital Medical Staff by the JCAH*, which recommends that the definition of medical staff, as it now exists, be continued in the new JCAH Accreditation Manual for Hospitals: (See Page 593)

Dr. Rial: I would like to say that I personally support the intent of this resolution completely. There is no problem with it, and whether it is passed or not, probably is not going to impact on the final decision, because the final decision has to go past the lawyers for the American Hospital Association and the American Medical Association. And it probably won't be acted on finally by the Joint Commission until the February or March meeting of the Standard and Survey Procedures Committee. I think it would be very helpful, from the point of the view of the AMA Commissioners, if this resolution were approved and forwarded to the AMA House of Delegates for its information and discussion at our Interim Meeting in Miami this December. I would support the intent of the resolution. But I can tell you that it has a dim chance of passing the attorneys for the AMA and the AHA because of the restrictive implications in the resolution that would exclude limited licensed practitioners from privileges of admitting patients to the hospital in those states where their Attorney Generals have interpreted the law to say that limited licensed practitioners can indeed admit patients to the hospitals.

. . . The House applauded as Dr. Rial left the podium . . .

*PRESIDENT OF THE MEDICAL LIABILITY MUTUAL INSURANCE COMPANY**

. . . Speaker Clowe introduced Arthur Mannix, Jr., M.D., President of the Medical Liability Mutual Insurance Company, who addressed the House as follows:

Dr. Rosenberg, Dr. Eberle, members of the House of Delegates, friends, and colleagues. I'd like to be able to stand here today and give you a clear and precise report of where we stand in the field of medical malpractice, and particularly the activities of the Company which had its genesis in this room. However, clarity is something which is still several years down the road.

Some things are certain. We are gathered together today in the most litigious State in the union. Personal injury verdicts, excluding medical malpractaice, run 30 percent above the norm in this State. The areas around New York City and Long Island are 33 percent above the national average. This does not include medical malpractice, which outstrips these by a great number. On the State level we have seen, the competitive insurance mechanism and I should like to give you an up-date, at the present time, of its impact on the Medical Liability Mutual Insurance Company.

Notwithstanding that there were other insurance mechanisms available, the ranks of new policy holders to this Company increased by about 1,500 as of July 1, 1982. We found that we lost roughly 400 policyholders who informed the Company that they were transferring to another carrier, for a net gain of 1,100 policyholders. We had offered our policyholders a second type of insurance for the first time. Of our 18,000 policyholders, roughly 1,200 have, to date, switched to "claims made" type of coverage. These figures have some fiscal impact on the overall premium structure, but one which can be well accomodated within the operations of the Company.

The premium income for the Company for the years 1975 through policy year 1982 will be just short of one billion dollars. This reflects not so much a measure of success, but the significant magnitude of the problem which you and I seek to insure in the State of New York. Best's, the Insurance "bible," places this Company as the second largest writer of medical malpractice insurance in the United States.

We should like to try to assess where we are and how we stand in our activities. Each year, when we determine a premium figure 68 million for 1975, we also wrote down what our expected losses would be after all claims were paid against that policy year. We found that our projections at each year's filing totaled roughly 1.8 billion dollars. This was against a premium income of slightly less than one billion.

The earlier you look at insurance figures, the more profitable the line appears. The more remote you are from the policy year, the more devastating and ominous the figures are. Best's says you really shouldn't have any degree of accuracy in looking at numbers for at least eight years. We have not yet been in business eight years, so let's take a quick look at policy year 1975.

We collected 68 million dollars. We anticipated in 1975 that we would be paying out about 85.5 million dollars. As of September 30th, 1982, we have incurred slightly in excess of 3,000 cases chargeable to policy year 1975, against an initial estimate of about 3,100 cases; fairly close to the mark. Our loss frequency of cases being indexed in the last few-months, chargeable to 1975, show that perhaps one or two cases a month are being logged. So it seems that we're relatively on target with frequency.

Let's look at severity for the moment. We have estimated 85.5 million dollars of losses. We have against the 3,000 odd cases reserves placed on these files of 125 million dollars; considerably above the cost that we anticipated in 1975. Yet these are only reserves. We have closed 2,000 cases, roughly two out of every three, and to date the payment on those files is about 46 million dollars. That certainly seems to be a comfortable figure to work with. However, in those thousand files, which remain outstanding, are the very, very costly cases which have yet to be adjudicated. Looking at the numbers of what it costs in cases where we are making payments for policy year 1975, we find that the average cost of a closed file where payment is made is running in excess of $93,000 per file. Extrapolating that figure, we find that perhaps the 125 million is short of the mark, and recent actuarial projections predict a figure in excess of the 125 million. So much for a year which is still not ripe enough to have any firm, solid clarification of where we stand.

Other years show a more significant upswing of the cost of files. 1978 files, on which we have closed payments, are averaging in the vicinity of $125,000.

In 1975 cases, which included some where there was no payment, payments averaged out to about $40,000 per file. This ran about $12,000 above our original projection.

Are there some encouraging figures for you and for me as potential defendants? The answer is, certainly there are. Of over 2,300 cases closed just short of trial, the physicians have prevailed in about 60 percent of the cases. Of those, 40 per cent which were settled before trial, we paid out a total of 77 million dollars. In the cases that went to a jury verdict, we were very pleased to find that we were winning well over 50 percent of the cases. However, there is a figure which remains significant to all of us; the court costs to defend nonmeritorious cases is in excess of $15,000.

Admittedly, most of these figures are still estimated figures. Yet there is one unfortunate factor which remains prevalent throughout all of these figures. The actuaries who look at the figures and forecast the future trends all have one thing in common. Everything is up and very little is down.

I'd like to address myself for a very brief moment to something which has troubled many of you. In the last two years this Company filed for the significant premium increases and yet settled for twenty-six percent and fifteen percent, instead of pursuing our original request actively in the courts to attain what we felt was a real measure of needed premium. We are totally convinced that our estimates were correct. We compromised with the Insurance Department for a few reasons. Number one, we will be in a very grave fiscal position in ten or twelve years because by failing to capture the necessary premium and the investment income, which would flow from that premium, our actuaries have estimated that we will fall roughly a third of a billion dollars further in arears in the collected premium as opposed to the anticipated losses.

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* Dr. Mannix addressed the House at the Tuesday morning session.

As a practical matter we are physicians and we pledged that we would try to keep the premiums at the lowest common denominator. Consistent with that, it seemed reasonable and prudent to the members of the Board of Directors of the Company representing physicians not to say we really want a seventy-three percent increase when the Insurance Department had stated" fifteen percent is all we're going to give you." We felt that we would have mass defections from the Company. We also felt that it would be a horrible victory four or five years from now if we prevailed and succeeded through the courts.

The legal advice was that there was very little probability that we would succeed. Let us assume that we did prevail. How many of you in this room would welcome a bill in 1986 for a retroactive premium, chargeable to 1981, in excess of several thousand dollars? It would be difficult to collect, and for some of us it would be impossible because we wouldn't be in business.

So we took the practical expedient of compromising with the Insurance Department, which has been anything but of assistance in our malpractice problems.

Last week was a very significant week in New York City. An extraordinarily fine seminar was held, dealing with the brain damaged child. The attendance was very good. Over 500 people registered to attend this seminar. It covered a very wide spectrum, including the causes, the recognition, the awareness, and the prevention of the brain damaged child. Everyone was enthusiastic about the seminar. There was just one hollow note, it was sponsored by the Trial Lawyers Association, and the 500 in attendance were lawyers learning how to make further onslaughts in the field of medical malpractice.

The doctors from Pennsylvania say that we must be political activists to have impact. I'll go one step further and tell you that political activism is crucial to the survival of any insurance mechanism, if we ever expect to have meaningful tort reform because certainly there are grave doubts as to whether or not what we seek to insure is insurable at any cost in this State. But if we are to make any inroads, we must not only be active with our own confreres, but we must move out into the whole political arena and seek active roles in the political party of our choice at the grass roots level by being committeemen, either Republicans or Democrats, so that you may have a spokesman's effect in the selection of people who will run for public office and not try to influence them once they get there. A politician, once he is elected, is very apt to forget promises. You should be active locally in your communities in the political arena to help assist these people who run for public office, who may have some modulating effect on the malpractice climate in New York.

We have had no significant tort reform in recent years and we are certainly, as a profession, at the breaking point in the affordability of further premium increases. Yet now we see other people paying attention to the things that we have been crying about. Several weeks ago, Harrison Goldin, the Comptroller of the City of New York, decried the high cost of public liability to the City of New York.

Aren't we all intrigued by the concept of departure from the jury system? Johns Manville, in filing for bankruptcy, because of the many thousands of personal injuries, seeks to place the adjudication of these personal injuries, not before a jury system, but before a single sole bankruptcy referee who will decide the cases; and the element of pain and suffering will no longer be a feature. Perhaps in these bankruptcy proceedings we may seek a model role which may have applications to the field of medical malpractice.

Lastly, we should look at ourselves. One company traveled around the State, stating that they would have selective underwriting because they would weed out the bad doctors. That company was applauded as having a very sound fundamental principle. Many of you hold a position of responsibility in your community hospitals, moderating and controlling the bad apples at a community level. The credentialing process in your hospital should certainly be looked at with a greater degree of sincerity and fidelity than ever before. Because you and I can very readily identify those people in our community who are practicing, as a matter of course, substandard medicine to the detriment of all of us.

And lastly, I would ask your attendance at the Annual Meeting of the Company. To accomodate more people we have moved it back to the first Thursday in May. This year it will be May 5, 1983; at ten a.m., at the Tarrytown Hilton. Last year we went to Albany. We had an excellent turnout in the legislative capitol, and had the keen participation of the policyholders in discussions and questions of management. We welcomed that. We run an open Company. During the past year we've met with county and specialty delegations to discuss matters which concern them. We shall continue that policy in the future.

I thank you for the high privilege of addressing you this morning.

. . . The House applauded as Dr. Mannix left the podium . . .

*PRESIDENT OF THE AMERICAN MEDICAL ASSOCIATION AUXILIARY**

. . . Speaker Clowe recognized Mrs. Torrence P. B. Payne, President of the American Medical Association Auxiliary, who addressed the House as follows:

Mr. Speaker, Dr. Rosenberg, Dr. Eberle, Dr. Siegel. I am delighted to be here in my beloved State of New York to bring you greetings from my national family of 50 states, 1,050 counties and over 80,000 members. You can't imagine how wonderful it is to be home among my dear, dear friends.

I thank you for the privilege. It is both an honor and a pleasure to speak to you. Your support and your guidance have been vital to me in my leadership of the New York Auxiliary and now the AMA Auxiliary; and your friendship through the years has been a constant source of strength.

Today I feel I wear two hats, humbly as the President of the AMA Auxiliary and proudly as a member and Past President of my own New York State Auxiliary. In either role I am very much aware of the importance of you, the leaders of medical care, to our work. It would be impossible to adequately express our gratitude for your leadership. Perhaps we best express it through our work as your volunteer arm. As our name indicates, we are part of you, your partners, and we share your goal of furthering medical and health care throughout this country, and improving the quality of life for its citizens.

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* Mrs. Payne addressed the House at the Sunday afternoon session.

In my inaugural address to the AMA Auxiliary House of Delegates last June, I emphasized the importance of volunteer efforts, particularly at this time. I also spoke, since I am a naturalized American citizen, about my firm allegiance and commitment to this nation, for to me these two things cannot be separated. Our volunteer efforts on behalf of the people are what make this country strong.

Now, as President Reagan emphasizes citizens' involvement in this nation's problems, our work is more important than ever, but it is your assistance and your participation, your leadership, which make our efforts a success. Your own Auxiliary has shown the importance of your guidance in these programs. The response to the medical malpractice crisis, as the Auxiliary worked side by side with you, is an excellent example of this.

The Recognition Stamp which the Auxiliary has produced is promoting good relations between physicians and patients, and is used throughout the country. In fact, all of the Auxiliary programs on substance abuse, nutrition, smoking, vision screening, organ donation, are all carried on to further your goal of good health. You have an outstanding Auxiliary and an outstanding President in Anne Prezio.

The spirit of volunteerism, which is the basis for this work, is as much part of these United States as our institutions of government and social welfare. This nation depends upon the work of volunteers to keep it growing. In these times of special needs we have to reaffirm a commitment to the volunteer spirit upon which this land was founded. As the nation needs our support, so does organized medicine need our participation.

The great challenge which faces medical and health care deserves the attention of every physician and every physician's spouse in this country. This is why, as I travel across the counties throughout this year, I emphasize the importance of belonging to the AMA and to the AMA Auxiliary in all three levels of the federation—county, state, and national, for only if we are involved will we be able to meet our mutual goals.

Your history here in New York has been one of excellence. National looks upon you as the State which for many years ranked at the very top, the State which is the educational, cultural and financial center without par in the nation, the State, as Virgil said, "Primus enter pares," the first among equals.

Now, the time has come for us to join forces; combine our efforts; work harder than ever before; increase our membership; unite our organizations, county, state, and national, into one vital force, one strong voice with clout so that our Empire State will once again regain its place of preeminence.

I urge you and all of your counterparts to support the AMA with your membership, whether you agree or not on every action, but you must agree that the work of the AMA in protecting the AMA system of health is vital to physicians and their families, to patients, and to every health practitioner in the country.

I thank you for your support and please continue to guide our work. As your Auxiliary and the AMA Auxiliary work to meet the new challenges to volunteerism, your leadership is exactly what we need.

Let us continue to work together to reach our goals. Our challenges are many, it's true, but if we are united in our cause, we will meet them and win our battles. Your Auxiliary is committed as your volunteer arm to your goals. Use us to help achieve your purposes.

At this particular time I would like to thank you personally, one and all, the entire MSSNY Delegation, especially Dr. Rosenberg and Dr. Siegel, and everyone else who was at my installation in Chicago in June. No one could have had a more supportive Medical Society, and I was truly humbled by the experience. You will always be a treasured part of my heart and my memory, and I thank you.

. . . The House applauded as Mrs. Payne left the podium . . .

PRESIDENT OF THE AUXILIARY TO THE MEDICAL SOCIETY OF THE STATE OF NEW YORK*

. . . Speaker Clowe recognized Mrs. Joseph A. Prezio, President of the Auxiliary to the Medical Society of the State of New York, who addressed the House as follows:

Mr. Speaker, Dr. Rosenberg, Dr. Eberle, members of the House of Delegates, distinguished guests: No one should care more deeply about the medical profession than the spouse of a physician. In my opinion, your strongest ally and your greatest advocate is a unique network of volunteers, at home and in the community, whose objectives parallel yours. This support group is made up of your spouses who choose to give countless hours in sharing time and talents in improving the health needs of the community. I refer, of course, to your Auxiliary.

As we are out in the community with our pulse on public opinion, we try to forget that the public thinks you are suffering from economic obesity, that you are a carrier of the virus of inflation and that the current lab report of your gross national product is over 12 percent. I am not exaggerating, and you know it, but you must remember one important thing, there is light at the end of the tunnel. It is the spouse you married who is a member of this organization, willing to assist in the problems facing organized medicine. Do you really know us?

When I assumed this office, we set out immediately to project a Statewide theme, simply stated, *"To Your Health."* The key to health was the road we chose to travel. We reinforced our goals and reached out in the community to participate in over 100 health related projects. We worked with hospital auxiliaries and community service agencies to emphasize this commitment. We held a Leadership Training Session in Buffalo, District meetings and many county programs.

Mrs. Prezio addressed the House at the Sunday afternoon session.

By now I hope you feel a little better about your image because all across New York State our members have worked to make the quality of life better. As community service volunteers, so many areas have been approached with sincerity and sensitivity that their motives cannot be challenged. I know, for I have been there and observed, first hand, the great accomplishments set forth factually, descriptively, and modestly in each county. I ask you to consider the county auxiliary in your area and, I repeat, do you really know what they do? I would be less than candid if I told you I actually believe that you all do.

A moment of reflection on an issue that occupied a great deal of energy on our part was the failure of the 1982 Legislature to enact significant malpractice reform legislation. We joined with you and responded to the direction of a request for assistance by producing an Auxiliary Hotline that paralleled that of Dr. Rosenberg's.

There is no doubt that we wrote as many letters as you did and had a great many responses. Tort reform may be the ultimate goal, but I predict that if we let up on the awareness campaign, it will never occur. You may recall that one third of the attendance at the MSSNY Legislation Day in Albany last March was that of Auxiliary. We will be happy to continue our support and assistance and we will be delighted to share in the credit for further successes. At every county meeting that I have attended the first question is always, "What about legislation?" Our members are knowledgeable and concerned. We will gladly assist you in the legislative arena, if you ask.

The 3,500 members scattered throughout this State also raised over $80,000 for health scholarships, $8,000 in support of the Physicians' Home, not to mention another $43,000 for AMA-ERF support. How many Foundations can rival this fund raising?

Since 1974, our participation in Council affairs has become increasingly more meaningful. We have gone from just being observers to actually contributing in Council affairs at the regular meetings. We now have two members who were appointed to the Interim NYMPAC Board by Dr. Schwartz. The names of Mrs. Theodore Tanenhaus and myself will appear on the slate for the upcoming merger.

Your membership increased with medical student membership this year. Their future is only enhanced by your continued interest and support. We are actively engaged in forming a spouse group in the Auxiliary and shall make greater efforts in this area.

Last June, New York achieved National recognition during the installation of Mrs. Torrence P. B. Payne as the AMA Auxiliary President. It was and is a proud occasion for the Medical Society and Auxiliary.

Our Physician Recognition stamp project, under the Chairmanship of Mrs. Ezra Wolff, continues to be successful and was recently heartily endorsed by the state of Michigan. Our chairman tells us that over 200,000 stamps have been sold.

It has been enlightening to observe and participate in the Council deliberations this past year. I wish to thank Dr. Rosenberg for his assistance and support. The Auxiliary joins with me in congratulating him on an outstanding term as President. I thank Dr. Siegel, who is the Auxiliary Advisor, for his continued interest and cooperation. I thank the Officers, Councilors, and the many staff members of the Medical Society for their many kindnesses this year. The assistance at the staff level is ever increasing and we are deeply appreciative. I wish Dr. Eberle much success, and pledge our continued support of Medical Society endeavors.

We enjoy a healthy rapport with MSSNY, and this can only continue to prosper. I hope that you will become increasingly aware of the Auxiliary efforts in your community. I have thoroughly enjoyed being the official Auxiliary representative this year. I am confident that, working together, we can help you put your best foot forward.

To Your Health, Ladies and Gentlemen. Thank you very much.

. . . The House applauded as Mrs. Prezio left the podium . . .

*PHYSICIANS' HOME**

. . . Speaker Clowe recognized D. Jeanne Richardson, M.D., President of the Physicians' Home, who addressed the House as follows:

Thank you, Mr. Speaker and members of the House of Delegates, for the opportunity to speak to this group.

Although the Physicians' Home is a separate legal entity from the Medical Society of the State of New York, it does exist to help needy physicians in New York State and it is very largely supported by the physicians of New York State. Therefore, it is only proper that we report to you concerning our activities of the past year.

Most of you know that we do not maintain a physical plant, we don't have a building or grounds. We try to assist our beneficiaries to remain in their own familiar surroundings. This is especially important in the case of the elderly, and it is also important in the case of families with dependent children. Our only requirement for aid is that the physician shall have been, at some time, a member of the New York State Medical Society.

When a case is reported to us we try to have a prompt and discreet investigation, either through our own social worker, hospitals or county societies. The aid is then disbursed according to the involved need.

These needs are reviewed at least annually, and increases are given in line with increasing needs and general increases in the costs of living.

Occasionally aid is decreased or discontinued as a result of information sent to us by the recipients.

If I may quote to you a case in point—this past August we received a letter from the aunt of three boys who had been orphaned when their physician father and their mother had died in 1972. Aid had been given to them to permit the aunt to maintain a home for these three boys for the past ten years. She wrote to tell us that they no longer needed aid because the youngest boy had just graduated from college and was now working. The total aid expended to that family had been $43,000.00.

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* Dr. Richardson addressed the House at the Sunday afternoon session.

At the present time we have 84 beneficiaries, their ages ranging from 43 to 98, excluding the children. They receive varying amounts from $150.00 to $750.00 a month. Our total disbursements for this past year, ending October 1, 1982, were $262,000.00, approximately $22,000.00 per month. Twenty years ago our entire disbursements for the year were $22,000.00. As you can see the needs have certainly grown over the past twenty years.

The generous support of the individual physicians, through their responses to the annual appeal, amounted to $86,000.00 in 1982. Voluntary assessments, through county societies', billings amounted to $24,000.00. The auxiliaries have also been very helpful to us and have contributed $7,900.00 this past year. This amounts to a total of $117,900.00, which was given by the physicians of New York State or their allied groups.

The difference between the disbursements and the annual contribution is made up from investment income. Over the years we have been recipients of memorial funds, of endowments, of gifts from other societies, and the moneys from that make up the difference that enable us to accomplish our beneficial aid.

We are extremely grateful to the members of the Medical Society of the State of New York, its component county medical societies and its auxiliaries for the generous support they have given us. We strongly urge your continued support, but we also request that if you know of any cases of needy physicians or their families, please report them to us, and we will endeavor to provide prompt and careful attention to those in need.

. . . The House applauded as Dr. Richardson left the podium . . .

PRESIDENT OF THE AMERICAN ASSOCIATION OF MEDICAL ASSISTANTS, NEW YORK STATE SOCIETY*

. . . Speaker Clowe recognized Janice Parish-Caplan, CMA-A, President of the American Association of Medical Assistants, New York State Society, who addressed the House as follows:

Speaker Clowe, officers, delegates, members, and honored guests. Thank you for inviting me to address you.

What should the physician know about the American Association of Medical Assistants, AAMA? It is not a collective bargaining association. It is an association dedicated to the process of education and the enhancement of professionalism.

Formal entry into the field of medical assisting in New York is now available through four two-year, associate degree schools: Broome Community College, Dutchess Community College, and Bryant & Stratton Business Institute in Buffalo and Rochester. These schools are accredited by our Curriculum Review Board. National certification for medical assistance was conceived and is supervised and administered by our Association.

The examination for certification includes anatomy, physiology, medical terminology, medical law and ethics, bookkeeping, psychology, insurance forms and laboratory. Specialty examinations are also available in administrative and clinical medical assisting. The examination is approved by the National Board of Medical Examiners. Continuing education for the medical assistant in your office is also stressed by the AAMA. Our chapters sponsor seminars and workshops for continuing education units, just as physicians earn their continuing medical education credits. We have a professional journal, guidance study programs and State and national meetings. These activites are designed to improve the skills and performance of medical assistants.

We ask you to encourage professionalism and improved performance in your own office employees by asking them to join their local chapter, which will be one of the 575 local chapters in 48 states that make up our national Association.

Medicine is no longer a cottage industry, but a field of technology and change. You, your office, and your medical assistant need to be continually aware of the needs of today and the developments of tomorrow. The American Association of Medical Assistants is proud to be a part of this process. Thank you.

. . . The House applauded as Mrs. Parish-Caplan left the podium . . .

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* Mrs. Parish-Caplan addressed the House at the Sunday afternoon session.

AWARD PRESENTATIONS*

. . . Speaker Clowe recognized President Rosenberg, who made the following presentations . . .

PRESIDENT'S CITIZENSHIP AWARD

. . . President Rosenberg recognized Ernest L. Sarason, M.D. . . .

Dr. Rosenberg: It is now my pleasant duty to present one of the most important awards of the Medical Society of the State of New York.

The President's Citizenship Award—originally called the President's Citation—was established in 1961 by Dr. Norman S. Moore, then MSSNY President. It was to be presented annually to a physician who has performed prolonged, outstanding community service, without remuneration, entirely unrelated to that physician's medical practice.

As President, it was my privilege to choose the winner of this award, which I found to be not an easy task. There were several very deserving nominees. I finally chose one whose activities represent just about everything that the President's Citizenship Award stands for. He is Dr. Ernest L. Sarason of Syracuse, who was nominated by Dr. Daniel L. Dombroski, President of the Onondaga County Medical Society.

A native of Syracuse and a practicing physician there since 1947, Dr. Sarason has been deeply involved in causes concerning education, the arts, the United Way, and the Jewish Community of Syracuse.

He has been a member of the alumni board of Yale (where he received his bachelor's and doctor of medicine degrees), President of the Central New York Yale Club and Chairman of the scholarship committee of the Rosamond Gifford Foundation, which is a general-purpose foundation benefiting residents of Onondaga County; Vice-President of two PTAs, and a member of a committee planning construction of a new junior high school.

Dr. Sarason's love of music led to his becoming a member of the Executive Committee of the Board of Directors of the Syracuse Symphony. His leadership has helped build the orchestra into one of the top 30 symphony orchestras in the nation.

When Dr. Sarason was head of the doctor's division of the United Way of Syracuse, contributions from physicians increased nearly 100% in one year. He has also served as Vice-President of the Community Foundation of Syracuse and Onondaga County.

Earlier this year, Dr. Sarason was presented with the Syracuse Jewish Federation's Roth Award for outstanding leadership in the Jewish Community. A campaigner for the federation's fund drives for some 35 years, he has held many leadership positions in the organization, including Vice-President and Chairman of the fund drive. He is also a former trustee of the Temple Society of Concord.

Dr. Sarason has been an attending surgeon at the State University Hospital of Upstate Medical Center since 1947, and is clinical professor of Surgery at SUNY Upstate. He is also an attending surgeon at Crouse Irving Memorial Hospital, Veterans Hospital, and Community General Hospital. He is the first physician ever to serve on the Board of Directors at Community General. He is a past president of the Central New York Surgical Society and a member of the Onondaga County Health Advisory Board and the American College of Surgeons. He and his wife are the parents of two sons and a daughter.

In the words of his nominator, Dr. Dombroski, Dr. Sarason "is a very special person, who is more interested in getting things done than in who should get the credit, and who asks no one to do more than he does himself. He is truly a man for all seasons." I am honored to present the 1982 President's Citizenship Award to Dr. Ernest L. Sarason, outstanding citizen of Syracuse, New York.

. . . Dr. Sarason thanked Dr. Rosenberg and stated that nothing could mean more to him than to be singled out by his peers. He expressed his gratitude to the State Society for according him this honor and also expressed the hope that in some small way physicians will be looked upon by communities at large as doing things other than rendering medical aid. The House applauded as Dr. Sarason left the podium . . .

THE ALBERT H. DOUGLAS, M.D., MEMORIAL TEACHING AWARD

. . . President Rosenberg recognized Martin Gardy, M.D. . . .

Dr. Rosenberg: The Officers and Directors of the Empire State Medical, Scientific, and Educational Foundation, Inc., are happy to bestow the Albert H. Douglas, M.D., Memorial Award for Excellence in Clinical Teaching on Martin Gardy, M.D.

Dr. Gardy, an associate professor of medicine at Cornell University Medical College, has been selected as an outstanding educator in clinical medicine.

Dr. Gardy's qualifications as teacher and clinician, and the extraordinary qualities that were defined in the many letters of his nomination from students, merited this outstanding award, which honors the memory of one who left his mark in medicine as an outstanding clinician and clinical teacher.

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* The President's Citizenship Award and the Fifty Year Citations were presented on Sunday at the opening session. The Albert H. Douglas, M.D., Memorial Teaching Award, and the Albion O. Bernstein, M.D. Award were presented at the Tuesday morning session. The William Hammond Award, and the Redway Award were presented at the Tuesday afternoon session and the Henry I. Fineberg, M.D., Award for Distinguished Service was presented at the Wednesday morning session.

. . . Dr. Gardy thanked the Society for the award and expressed his gratitude to the students, house officers, and colleagues who nominated him. Dr. Gardy remarked that it gave him the opportunity to express and practice a small portion of the Hypocratic Oath, "To respect and to hold him who has taught me this art as equal to my parents." He further commented that in honoring him the Society was also honoring two individuals who had taught him the art of medicine, Dr. Elliot Hochstein and Dr. Aaron Feder . . .

. . . The House applauded as Dr. Gardy left the podium . . .

ALBION O. BERNSTEIN, M.D., AWARD

Dr. Rosenberg: The Albion O. Bernstein, M.D., Award is given annually to a physician or scientist for an outstanding achievement in medicine. This award, presented under the auspices of the Medical Society of the State of New York, was established by the late Morris J. Bernstein to perpetuate the memory of his son, a physician who tragically lost his life while responding to a medical call.

The recipient of the 1982 award is Wylie W. Vale, Jr., Ph.D., associate research professor, the Salk Institute, San Diego, California.

The selection of Dr. Vale for this singular honor represents a significant recognition for his fundamental work in the elucidation of neural influences upon peptide hormone production.

. . . Dr. Vale was unable to be present to receive the award because of previous commitments. He had informed the Society by letter that he felt profoundly honored to be selected to receive the 1982 Albion O. Bernstein, M.D., Award. The House applauded . . .

WILLIAM HAMMOND AWARD FOR DISTINGUISHED SERVICE TO THE JOURNAL

. . . President Rosenberg recognized George J. Lawrence, Jr., M.D. . . .

Dr. Rosenberg: In presenting the William Hammond Award to George J. Lawrence, Jr., M.D., we are honoring both the *Journal* and Dr. Lawrence.

For many years a member of the Associate Editorial Board, Dr. Lawrence has made great contributions as a consultant; his support and suggestions have been invaluable.

. . . Dr. Lawrence expressed his appreciation for being chosen as a recipient of the William Hammond Award and gave credit to the staff of the *Journal* for doing an outstanding job. The House applauded as Dr. Lawrence left the podium . . .

REDWAY AWARD

. . . President Rosenberg recognized Yusuke Kanke, Ph.D. and Reza Bashey, Ph.D.

Dr. Rosenberg: The *New York State Journal of Medicine* is happy to extend to Yusuke Kanke, Ph.D., Reza Bashey, Ph.D., and Yo Mori, Ph.D., the twentieth annual Laurance D. Redway Award and Certificate for their articles entitled "Biochemistry of Collagen" and "Biochemistry of Glycosaminoglycans," published in the June and August, 1981, issues of the *Journal*.

The June, 1981, article presented basic knowledge of the biochemistry of collagen at that time, and the alterations and defects in collagen metabolism which give rise to disease. The August, 1981, article dealt with the nonfibrous components of connective tissue and their aberrations.

This important contribution deserves our recognition and special commendations.

. . . Dr. Kanke and Dr. Bashey expressed their gratitude for the honor bestowed upon them as well as the gratitude of Dr. Mori who was unable to be present to receive the award. The House applauded as Dr. Kanke and Dr. Bashey left the podium . . .

HENRY I. FINEBERG, M.D., AWARD FOR DISTINGUISHED SERVICE

. . . Speaker Clowe introduced Arthur Diedrick, M.D., Chairman of the Board of Trustees, who addressed the House as follows:

Dr. Diedrick: Mr. Speaker, fellow colleagues and members of the House, guests, ladies, and gentlemen. In 1980, the Board of Trustees established an annual Trustee award of the Medical Society of the State of New York, which is called the Henry I. Fineberg, M.D., Award, and it honors a worthy individual for distinguished service.

I would like to ask Dr. Fineberg to present the award to Dr. Norman S. Moore.

Dr. Fineberg: Mr. Speaker, members of the House, ladies, and gentlemen. I have had many grand assignments in my career at the Medical Society of the State of New York, but this is one of the finest. I am really touched and delighted and highly honored to have been chosen on behalf of the Board of Trustees to present this award for distinguished service to a giant in our profession, Norman S. Moore, M.D.

I like to call him the complete doctor of medicine. I can't possibly enumerate his achievements, his accomplishments—all of them superb. Dr. Moore has had a grand medical heritage. His father, Veranus A. Moore, was an eminent doctor of medicine, educator, and scientist.

Dr. Moore not only was a practitioner of our great calling, but he decided to do something about other professions, especially veterinary medicine, which was then in the doldrums. He decried the fact that the ills of our animals were being taken care of by people inept in the art and science of healing animals. He did something about making veterinary medicine a decent profession. It is now one of the learned professions in our country. The Cornell College of Veterinary

Medicine is known throughout the world.

Dr. Moore attended the undergraduate school of Cornell, where he was an honor student, the Cornell Medical School, where he became a member of Sigma Xi, OAO, and then went on to Bellevue and the Rockefeller Institute.

Dr. Moore specialized in internal medicine. He was put in charge of and operated the Gannett Clinic, which was established from donations by that great newspaper family. He took care of the ills and health of thousands of students at the clinic and became part of the community.

He became an expert in the field of public health and was consulted when decisions were needed regarding the health and welfare of the people in our State. He became Chairman of the Public Health Council, Chairman of the New York Hospital Planning and Review Council, as well as participating in many other organizations and on committees.

Dr. Moore became a statesman. Some people say maybe you would call him a politician, but he was more than that. He became president of his county medical society, president of his district branch, Vice-President and President of the State Medical Society, and served fourteen years as a member of the House of Delegates of the American Medical Association. And all the time he was humble, and that is a sign of greatness.

In my farewell address to the House in May, 1960, when Dr. Moore was President-Elect of the Medical Society, among other things, I had this to say, "In a few days the reigns of the presidency will be turned over to a distinguished doctor of medicine, Norman S. Moore, M.D. I have admired him for a long time. The past year I have learned to know him intimately, and this has been my good fortune. Here we have a gentleman of intelligence and culture, steeped in the tradition of medicine, a man of integrity, with a keen insight into our problems and what is best for us and the people. Dr. Moore will talk straight from the shoulder and you will always know where he stands, whether he agrees or disagrees with the popular philosophies. He has the courage of his convictions. He will be a great president." And he proved to be that.

So, ladies and gentlemen, we have here a very unusual person, a man for all seasons. It is with a feeling of personal pride that I present this award to Norman Moore.

. . . Dr. Moore accepted the award and expressed his gratitude at having received an award that was named after his longtime friend, with whom he has had many forays in the medical affairs of this State, Henry I. Fineberg, M.D. He acknowledged that he has been involved in many activities, medical as well as nonmedical, in his career of fifty-six years in the medical field. Dr. Moore summarized his long and illustrious career and closed with the following quotation, "What I have spent is gone, what I have kept is lost, what I have contributed is mine forever." The House applauded as Dr. Moore left the podium . . .

FIFTY YEAR CITATIONS

President Rosenberg: There are several traditional functions performed by the president at these House of Delegates meetings. It is now my pleasure to recognize a group who closely represent the tradition of medicine itself: Our colleagues who are celebrating their golden anniversary in the practice of medicine.

This year we will honor 302 members of MSSNY for 50 years of service to their patients. Soon after this convention, engraved citations will be sent directly to each of these physicians, or to their county medical societies for presentation at a county society meeting.

Although time does not allow for the presentation of the citations or reading of the names here today, we will name each of these physicians in the minutes of this House of Delegates meeting.

I would like to extend to each 50-year member of MSSNY my wishes and those of the State Medical Society for many additional years of good health and happiness.

. . . The House applauded . . .

The list of recipients follows:

Albany

William L. Holt, Jr
Joseph James Hynes
Raymond Gregory Leddy
Paul Schultze, Jr.
Arthur Joseph Sullivan

Allegany

Roger W. Blaisdell

Bronx

Edward Bader
Nathan Bercovitz
Remo Cancellieri
Anthony Joseph Cerrato
William Columba Clyne
Mark Daniel
Walter Einhorn
William Nicholas Fosco
Leo Arthur Fox
Joseph Giuffre
Moe Abraham Goldberg
Morris A. Goldberg
Karl Herz
Alexander Sandor Honig
Paul A. Hurwitz
Ira A. Jaffe
William M. James
Abraham Katz
William A. Kenna
Milton D. Klein
Rose Koblenz
Jules M. Koch
Alfred E. Lazar
Harry David Markman
Henry Pinski
Frank A. Quattromani
Irving Rosenstein
Sydney Maurice Simon
Joseph Spanbock
H. Harold Taus
Saul Weinstein

Broome

Charles Francis Hawley
Anthony La Russo
Nicholas R. Occhino
Ben Sobel
Arthur Solomon
Myrtle M. Wilcox

Cattaraugus

Isabella S. Rendall Ralph

Chautauqua

Robert R. Northrup

Chemung

William Rufus Phillips

Chenango

Martin H. Jacobi

Clinton

Arthur B. De Grandpre
Gilbert Edward Ganong

Columbia

Rosewell D. Shaw

Delaware

Robert V. Schatken

Dutchess

Paul Matthews Lass

Erie

Andrew James Charters
Francis Robert Coyle
Arthur J. Cramer, Jr.
Elmer Friedland
Leo E. Kopec
George H. Marcy
Raymond Jospeph McCarthy
Benjamin E. Obletz

Essex

Thomas Riley Cummins
Rudolph Joseph Martin

Jefferson

James Lamont Crossley

Kings

Irwin Leonard Alben
Benjamin Berman
Abraham Bornstein
Louis Brockman
William Thomas Carrington
Abraham Maurice Cutler
Vincent D. Francis
Lawrence Gambert
Israel Gerberg
Solomon E. Gittleman
Solomon Glotzer
Sidney S. Heilweil
James A. Inciardi
Martin Jacobs
Morris Kanof
Abraham N. Kaplan
Abraham Karver
Alfred D. Klein
Sidney Kreinin
Leon Littman
David Marcus
Philip Vincent Messina
Michael A. Muehlbauer
George John Primavera
Nathaniel Edwin Reich
Robert Louis Rein
William Frederick Rexer
Hyman Samuel Rosenfeld
Harold N. Runsdorf
Abraham Marvin Sands
Max Morton Scharf
Abraham J. Schechter
Samuel Labe Scher
Jeanne E. Shore
George L. Sprenger
Max Hyman Stein
Samuel Lewis Swiller
John J. Tidona
Vincent Joseph Tesoriero
Samuel Waldman
Arthur H. Weinstein
Harold Weinstein
Nathan H. Wexler
Lena S. Zion

Madison

Paul Antonio Ferrara

Monroe

Murray Almon Bratt
Jacob Philip Freedman
Louis A. Goldstein
Louis Aloysius Iuppa
William Alfred Petry
Joseph Rock
Charles Timothy Sullivan
Abraham Joseph Tatelbaum
Maria Wenzl

Nassau

Nathan Artsis
Maurice Brown Baim
Harold Birnkrant
Francis Edward Clarke
Jacob Eisenberg
Abraham W. Freireich
Franklin Weimer Fry
William Charles Graf
Frank Murray Green
Frederick E. Lane
David L. Lerner
Charles Joseph Leslie
Edward Meister
Robert Stephen Millen
Maxwell Stillerman

New York

Robert Morris Appel
Andrew Baeder
Charles P. Bailey
Leslie L. Bardos
Julius Belinkoff
William Irving Birnberg
Herbert Richard Blain
George Blinick
Warner F. Bowers
Sydney Bressler
Theodore Breuer
Peter Brikates
Alexander Bromley
Frank Denis Carroll
Orville K. Chancellor
Leonard Fisch Ciner
Lester Clahr
John Gordon Cole
Lester Laudy Coleman

John Melton Cotton
Robert Murray Cushing
Simon Dack
Morton Lester Davidson
Louise J. Despert
Dimitry Simon Dibich
Stanley M. Dillenberg
Theodore J. Edlich, Jr.
John Edward Franklin
Andrew George Franks
Constance Friess
Arthur Harvey Glick
Ricardo L. Gorbea
Leon I. Greenberg
Ruth Julia Guttmann
Donald Davis Harman
Leonard Leroy Hyams
Edward E. Jemerin
Richard W. Kessler
Henriette R. Klein
Edward J. Komora
Juan Larralde
Anthony E. Loscalzo
Joachim Luwisch
Herbert Caille Maier
Rafael A. Marin
Milton Mendlowitz
Francisco Merino
Willis A. Murphy
James Roam Nealon
Joseph John Oliva
Carl Raynold Palmer
Robert Lee Patterson
Malvin Proctor
Charles Anthony Ribuado
Rafael M. Rivera
Sidney B. Rosenbluth
Sidney Rosenfeld
Henry Ross
Robert E. Rothenberg
Irving Arthur Sarot
Albert J. Schein
Sheppard Siegal
Sidney M. Silverstone
Henry Max Singer
Leon Nathaniel Sussman
Ralph Maurice Sussman
William Volf Tenzel
Harvey J. Tompkins
Leo R. Varon
Alexander A. Vass
Arthur Vigdor
Robert I. Walter
Eva Johanna Weddigen
Abner I. Weisman
William D. Weiss
Alexander Wolf
Horace I-Sen Yu
Joshua Felix Zendel
Seymour Zucker

Niagara

Henry Robert Alderman
William Reese Lewis

Oneida

Edwin Deland Battles
Emanuel DeLalla
Bohdan Garbowski
Vito Sebastian Lee
Frank George Leone
Rudolph E. Vandeveer

Onondaga

Paul Marion Cramer
Frederick Nicholas Marty
Harold John Platz

Orange

Barbara Brunne
George E. Kenny
Harold Levy
Anthony Joseph Morreale

Orleans

Angelo Francis Leone
Guy M. Walters

Oswego

William W. Kogan

Putnam

Eli Eisenberg
Garrett W. Vink

Queens

Armand Thomas Carrano
Philip A. Chillemi
Robert Ruben Coleman
Patrick Henry De Canio
Benjamin Fabricant
William Casper Godwin
George Theodore Golding
Leonard Blaine Goldman
Arthur Gordon
Fred Seymour Grunwald
Louis Joseph Guardino
Jacob R. Handelsman
Milton Sherman Hartman
Alexander Kaiser
Arthur Kalish
George G. Krauss
Frank Luciano
Nathan Millman
Arnold Nathan
George Neuhaus
Richard R. Panebianco
Gourji Meir Raby
Alois B. Schwarz
William Francis Sharkey
Joseph Herbert Siris
Albert Michael Tapper

Rennselaer

Nicholzs F. Brignola
Orville L. Henderson

Richmond

Albert Theodore Berg
Herbert Berger
William A. Laszlo
Joseph M. F. Malin
Sidney Harvey Taylor

Rockland

Frank E. Ciancimino
Lazari Goldmann
Paul Howard Lefkowitz

St. Lawrence

Ernst Ludwig Adler

Saratoga

Clifford A. Kingsbury

Schenectady

August B. Korkosz

Steuben

Marion Joseph Chimera
Carmelo Edward Patti

Suffolk

Lauren V. Ackerman
Daniel Joseph Bradley
Henry Brill
Samuel Feinberg
Lewis Freeman Foster
Julius Peter Gale
John Gus Koromvokis
Hans G. Lowenkron
Carl C. Mandelbaum
Herman B. Rubler
Olga Marie Von Tauber
Royal Stanton Davis
Hugh Harold Gibb
Frank Goldstein
David Meyer Gordon
Samuel Alexander Hand
Arthur H. Milbert
Milton B. Philips
Frank A. Spellman
Robert Sidney Terris
Daniel A. Wilcox
Heinz Otto L. Wolff

Tompkins

Mary D. Ridgway Tinker

Warren

Stanley L. Edmunds
Jesse Silsby Parker

Washington

Stiles Dean Ezell

Wayne

Robert Carl Brigham

Westchester

Daniel Noyes Brown
Joseph George Cole

Wyoming

G. Stanley Baker

Introduction of Guests

. . . Speaker Clowe introduced the following guests, who addressed the House and were applauded . . .

William B. Beach, Jr., M.D., President of the Vermont State Medical Society

Michael P. Levis, M.D., President of the Pennsylvania Medical Society

Howard D. Slobodien, M.D., President of the Medical Society of New Jersey

Goodwill M. Stewart, M.D., President-Elect of the Massachusetts Medical Society

. . . Edward Siegel, M.D., Executive Vice-President of the Medical Society of the State of New York, addressed the House on behalf of John M. Sherwin, M.D., President of the New Hampshire Medical Society. Dr. Sherwin sent his regrets that he and Thomas F. Foley, M.D., Past Secretary of the New Hampshire Medical Society, had to leave to attend an important meeting in New Hampshire.

Introduction of Past-Presidents

. . . Speaker Clowe introduced the following past-presidents who were present in the House: James M. Blake, George L. Collins, Jr., G. Rehmi Denton, Henry I. Fineberg, Carl Goldmark, Jr., Walter T. Heldmann, Norman S. Moore, Ralph M. Schwartz, Edward Siegel, and George T. C. Way.

HOUSE COMMITTEE ON BYLAWS

To the House of Delegates, Ladies and Gentlemen:

The members of the House Committee on Bylaws are as follows:

Edgar P. Berry, M.D., *Chairman*	New York
Charles N. Aswad, M.D.	Broome
Allison B. Landolt, M.D.	Westchester
George Lim, M.D.	Oneida
Daniel F. O'Keeffe, M.D.	Warren
Milton Rosenberg, M.D., *President, ex officio*	Suffolk
Victor J. Tofany, M.D., *Secretary, ex officio*	Monroe
John L. Clowe, M.D., *Speaker, ex officio*	Schenectady

A meeting of the Reference Committee on Bylaws was held at the Grand Hyatt Hotel in New York City on October 12, 1981. The Reference Committee was appointed to receive input from delegates as to their thoughts on the resolutions referred to the House Committee on Bylaws. The input received from the meeting of the Reference Committee on Bylaws proved to be of great assistance to the House Committee on Bylaws.

In all, seven resolutions asking for amendments to the Bylaws were referred to the Committee for its consideration.

The following actions were taken with respect to the resolutions referred to this Committee:

Resolution 79-27, Age Qualification for Entitlement to Life Membership for Practicing Physicians

Introduced by Medical Society of the County of Queens

Whereas, The Bylaws of the Medical Society of the State of New York were changed to raise the age limit for life membership from seventy to seventy-five for "practicing" physicians; and

Whereas, The motivating factor for this change was the increase in the ratio of nonpaying members to the paying members; and

Whereas, Many practicing physicians over seventy years of age have a very limited practice, with limited income; and

Whereas, The increase in life membership age from seventy to seventy-five for these physicians is causing them to resign in bitterness; and

Whereas, Physician members with decreasing income are resigning from membership and the intended change in raising the age limit for life membership is, therefore, having the reverse effect; and

Whereas, Many of those resigning have been loyal, dues paying members for 30–40 years or more, and now feel betrayed, and are resentful, thus creating a poor image for MSSNY; and

Whereas, The Bylaws of the Medical Society of the State of New York should be amended to accommodate this change; therefore be it

Resolved, That Article II, Section 1, paragraph 6 of the Bylaws of the Medical Society of the State of New York be changed by deleting the word "seventy-five" and inserting the word "seventy" after the phrase "prior to the attainment of the age of."

Article II, Section 1, paragraph 6 would then read as follows:

"An active member in good standing who has completely withdrawn from the active practice of medicine and who has been a member in good standing for the ten consecutive years prior to the attainment of the age of seventy years or an active member in good standing who continues the active practice of medicine and who has been a member in good standing for the ten consecutive years prior to the attainment of the age of seventy years, or an active member in good standing for ten consecutive years or more who is permanently disabled, may apply for life membership. The House of Delegates or the Council may waive the requirements in a proper case where there appear to be extenuating circumstances. He shall apply for such life membership to the component county medical society of which he is a member. His application shall be governed by the constitution and bylaws of the component county medical society relative to active membership."

and

Resolution 79-39, Life Membership

Introduced by Nassau County Medical Society

Whereas, The Medical Society of the State of New York amended its Bylaws in 1978 concerning life membership; and

Whereas, The Nassau County Medical Society, in considering the changes in the MSSNY life membership category, believes there is no justifiable reason why a physician should not be entitled to life membership at the age of 70 rather than 75; and

Whereas, NCMS also believes that a physician who retires from the active practice of medicine, irrespective of age, and has been an active member in good standing for ten consecutive years should also be entitled to life membership; therefore be it

Resolved, That Article II, Section 1, paragraph 6 of the Bylaws be amended by deleting the phrase "prior to the attainment of the age of seventy years" after the words "ten consecutive years" and deleting the word "seventy-five" after the phrase "attainment of the age of" and inserting the word "seventy."

Article II, Section 1, paragraph 6 would then read as follows:

"An active member in good standing who has completely withdrawn from the active practice of medicine and who has been a member in good standing for ten consecutive years or an active member in good standing who continues the active practice of medicine and who has been a member in good standing for the ten consecutive years prior to the attainment of the age of seventy years, or an active member in good standing for ten consecutive years or more who is permanently disabled may apply for life membership. The House of Delegates or the Council may waive the requirements in a proper case where there appear to be extenuating circumstances. He shall apply for such life membership to the component county medical society of which he is a member. His application shall be governed by the constitution and bylaws of the component county medical society relative to active membership."

Resolutions 79-27 and 79-39 were referred back to the Committee by the House of Delegates. Because of the similarity of content, Resolutions 79-27 and 79-39 were reviewed at the same time.

The Committee firmly believes that the provisions relating to Life Membership should not be changed at this time. It is believed that the Bylaws adequately provide for those situations involving financial hardship or other extenuating circumstances. Attention is directed to Article II, Section 1, paragraph 6 of the Bylaws which provides, "The House of Delegates or the Council may waive the requirements [for Life Membership] in a proper case where there appear to be extenuating circumstances."

and

The House of Delegates in 1981 considered a substitute resolution for Resolutions 79-27 and 79-39 which reads as follows:

Whereas, The Bylaws of the Medical Society of the State of New York require 50 hours of CME credits per year to remain active members; and

Whereas, If a physician is retired he may not have the opportunity to obtain CME credits or if he is disabled he cannot obtain them and the expenses for these CME courses are high and not deductible if retired; therefore be it

Resolved, That Article II, Section 1, paragraph 6 of the Bylaws of the Medical Society of the State of New York be amended to read as follows:

"An active member in good standing who has completely retired from the practice of medicine or is totally disabled and who has been a member in good standing for a minimum of ten years prior to the attainment of the age of seventy years is entitled to apply for life membership. Those who have attained the age of seventy years and above but continue the practice of medicine and have been members in good standing for the below prescribed number of years may have their dues reduced according to the schedule outlined below.

Schedule

Age	Prescribed Years Good Standing	% of Reg. Dues
70	25	80%
71	22	60%
72	19	40%
73	16	20%
74	13	20%
75 + above	10	0%

The House of Delegates or the Council may waive the requirements in a proper case where there appear to be extenuating circumstances. He shall apply for such life membership to the component county medical society of which he is a member. His application shall be governed by the constitution and bylaws of the component county medical society relative to active membership."

Explanatory Notes

In 1970 the active members numbered 24,261
In 1980 the active members numbered 21,431
This is a decrease of 11.6% or 2,830

In 1970 the life members numbered 2,791
In 1980 the life members numbered 4,348
This was an increase of 55.8% or 1,557

Proportion of life members to active members in 1970, 11%
Proportion of life members to active members in 1980, 20.3%
Proportion of life members to total members in 1970, 10%
Proportion of life members to total members in 1980, 16.86%

If our total membership had remained from 1970 to 1980, 16%
If our membership had increased an average of 1% per year, 15.4%

Our concern should be to recruit more younger physicians from the 22,000 that do not belong to the State Medical Society.

Resolutions, 79-27, 79-39, and the substitute resolution were referred back to the Committee by the House of Delegates in 1981.

The Committee reviewed the entire question concerning life membership, but remains convinced that the provisions relating to life membership should not be changed. It is the opinion of the Committee that the current requirements adequately provide for those situations involving financial hardship or other extenuating circumstances.

The Committee, therefore, unanimously recommends **DISAPPROVAL** of Resolutions 79-27, 79-39, and the substitute resolution.

There was a motion to divide the question and vote on each resolution separately.

The Speaker ruled that the House consider each resolution separately.

◆

⇒ . . . *The House voted to* **NOT ADOPT** *the substitute resolution . . .*

⇒ . . . *The House voted to* **NOT ADOPT** *Resolution 79-27 . . .*

⇒ . . . *The House voted to* **ADOPT** *Resolution 79-39 . . .*

Resolution 81-3, Chairman of the Board of Trustees as a Member of the Executive Committee

Introduced by Paul M. DeLuca, M.D., as an Individual

Whereas, Under the Bylaws of the Medical Society of the State of New York the Executive Committee has the authority to take action in case of emergency arising in the interim between the meetings of the Council; and

Whereas, Under the Bylaws, the Board of Trustees is given charge of property, including trust funds, and supervises the financial affairs of the Medical Society of the State of New York; and

Whereas, The chairman of the Board of Trustees is a member of the Council; and

Whereas, In his capacity as both a member of the Board of Trustees and Council, the chairman of the Board of Trustees may have expertise which may be of great assistance to the Executive Committee in its deliberations; therefore be it

Resolved, That the Medical Society of the State of New York amend its Bylaws so that the chairman of the Board of Trustees will become a member of the Executive Committee of the Council; and be it further

Resolved, That Article IV, Section 4, paragraph 1 be amended by adding the words "chairman of the Board of Trustees" after the word "treasurer."

Article IV, Section 4, paragraph 1 would then read as follows:

"The Council shall establish an executive committee to be composed of the president, the vice-president, the president-elect, the immediate past-president, the secretary, the treasurer, the chairman of the Board of Trustees, and two additional members of the Council appointed by the president with the approval of the Council."

The Committee was in unanimous agreement that the input from the Chairman of the Board of Trustees would be valuable to the Executive Committee and the Council.

The Committee, therefore, recommends **APPROVAL** of Resolution 81-3.

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⟹ . . . *The House voted to* **ADOPT** *Resolution 81-3* . . .

Resolution 81-7, Rescinding of Continuing Medical Education Requirement for Membership

Introduced by Medical Society of the County of Columbia, Inc.

Whereas, The Bylaws of the Medical Society of the State of New York state that continuing medical education be a requirement for membership; and

Whereas, Physicians have always taken pride in voluntarily continuing their education; and

Whereas, This often creates a hardship in smaller communities where physicians must leave their practices uncovered in order to obtain Category 1 credit; and

Whereas, The high cost of obtaining Category 1 credit may impose hardship; and

Whereas, Only 26,000 physicians of the estimated 48,000 licensed in New York State belong to MSSNY; and

Whereas, The remaining 22,000 do not have this mandate and may still practice good medicine; and

Whereas, This may cause some of the 26,000 members of MSSNY to resign; therefore be it

Resolved, That the Continuing Medical Education requirement for membership in the Medical Society of the State of New York be dropped; and be it further

Resolved, That Article II, Section 3, of the Bylaws of the Medical Society of the State of New York be deleted to effectuate this change.

Article II, Section 3, presently reads as follows:

"An active member who fails to fulfill the requirements for continuing medical education established by the Council of the Medical Society of the State of New York shall not be in good standing. This Section shall become effective on March 1, 1981.

"An active member as defined in Article II, Section 1, who is found not to be in good standing as of March 1, 1981, or March 1 of any subsequent year, for failing to comply with paragraph 1 of this Section shall receive reasonable notice that he must fulfill continuing medical education requirements by the last day of December of the year in which he is found not to be in good standing. An active member who does not fulfill continuing medical education requirements by the last day of December of the year in which he is found not to be in good standing shall automatically cease to be a member of the component county medical society and the State Society, unless, in the view of the Council, specific mitigating circumstances exist that the physician could not complete the CME requirements."

The Committee fully explored the question of CME requirements and was satisfied that the present requirements are reasonable in providing members with ways in which they can be in compliance. The Committee fully believes that the Medical Society's CME program is vastly preferable to any CME program that could be mandated by legislative action. It is the concern of this Committee that, if the Medical Society discontinues its CME program, there would be a greater impetus to mandate CME by legislation, and, in all likelihood, CME requirements imposed by legislation would be more onerous.

The Committee, therefore, unanimously recommends **DISAPPROVAL** of Resolution 81-7.

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⟹ . . . *The House, after discussion, voted to* **NOT ADOPT** *Resolution 81-7* . . .

Resolution 81-41, Proposed Member of the Medical Student Membership as a MSSNY Delegate to the AMA House of Delegates

Introduced by Jeffrey H. Dresner and Matthew J. Kuhn, Delegates Medical Student Membership

Whereas, The precedent has been established by a number of state medical societies to annually reserve for a medical student member a position of society delegate or alternate delegate to the House of Delegates of the American Medical Association; and

Whereas, By voicing opinions, through their medical student member delegate to the House of Delegates of the American Medical Association, the medical student sections of these respective states have assumed unique and dominant positions in national medical politics; and

Whereas, The Student Membership of the Medical Society of the State of New York counts its constituents from among the largest per capita pool of students and schools of medicine and of osteopathy than any other state in the Union, but continues to lag behind much smaller states in both student interest and political clout of the national level of organized medicine; and

Whereas, The Student Membership of MSSNY is currently funded by the Medical Society of the State of New York to send a nonvoting observer to the proceedings of the House of Delegates of the American Medical Association; and

Whereas, Without a voice on the New York State Delegation to the House of Delegates of the American Medical Association the scope of accomplishment and impact of the Medical Student Membership of MSSNY on "organized student medicine" outside the confines of New York State is essentially crippled, relegating MSSNY's student membership to a back-seat when compared with the national voice exercised by the American Medical Student Association (AMSA) chapter in New York State; and

Whereas, The establishment of a New York State student delegate to the House of Delegates of the American Medical Association would significantly increase the interest and political leverage of New York State medical students and thereby serve as a positive factor in aiding membership recruitment efforts by the Medical Student Membership of the MSSNY; therefore be it

Resolved, That Article III, Section 2, paragraph 2 of the Bylaws of the Medical Society of the State of New York be amended by adding a sentence to read:

"In each year at least one delegate or one alternate delegate from the total number of delegates that the Medical Society of the State of New York shall be entitled at the American Medical Association shall have been elected from among qualified student members nominated by the medical student membership."

Article III, Section 2, paragraph 2 will then read as follows:

"It shall elect the officers, councilors, and trustees of the State Society and the delegates to the American Medical Association. In each year, at least one delegate or one alternate delegate from the total number of delegates that the Medical Society of the State of New York shall be entitled at the American Medical Association shall have been elected from among qualified student members nominated by the medical student membership."

The House Committee on Bylaws believes that qualified student members of the Medical Society of the State of New York may serve effectively as delegates to the American Medical Association, and, therefore, student members, in good standing, should be eligible for election as delegates to the AMA. The Committee, however, does not believe that any delegate position should be reserved for any group or class of membership. The Committee, therefore, recommends that the following substitute resolution be approved:

Resolved, That Article III, Section 2, paragraph 2 of the Bylaws of the Medical Society of the State of New York be amended by adding a new sentence to read:

"A student member of the Medical Society of the State of New York, who is in good standing, is eligible for election as delegate to the American Medical Association, provided he is a member of the AMA."

Article III, Section 2, paragraph 2 would then read as follows:

"It shall elect the officers, councilors, and trustees of the State Society and the delegates to the American Medical Association. A student member of the Medical Society of the State of New York, who is in good standing, is eligible for election as delegate to the American Medical Association, provided he is a member of the AMA."; and be it further

Resolved, That Article II, Section 2, paragraph 4 of the Bylaws be amended by adding a sentence to read:

"In addition, student members shall be entitled to the rights and privileges otherwise accorded in these Bylaws to students."

Article II, Section 2, paragraph 4 would then read as follows:

"Student members shall be entitled to receive the *News of New York*. Each student member shall only be entitled to receive the *New York State Journal of Medicine* upon his individual written request, on an annual basis. Student members shall not be entitled to receive the *Medical Directory of New York State* free of charge. In addition, student members shall be entitled to the rights and privileges otherwise accorded in these Bylaws to students."

Accordingly, the Committee unanimously recommends **APPROVAL** of the substitute resolution for Resolution 81-41.

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⇒ . . . *The House, after discussion, voted to* **ADOPT** *the substitute resolution for Resolution 81-41 . . .*

Resolution 81-43, Student Membership in County Medical Societies

Introduced by Jeffrey H. Dresner and Matthew J. Kuhn, Delegates, Medical Student Membership

Whereas, It is to the advantage of the Medical Society of the State of New York to encourage early interest in the activities of organized medicine by students of medicine or of osteopathy enrolled in respective programs in New York State; and

Whereas, The county medical societies are in the best position to provide the forum for involvement by locally enrolled students of medicine or of osteopathy; and

Whereas, There is not currently a consistent policy among the sixty-one component county medical societies of the Medical Society of the State of New York relative to student membership and extent and avenues of involvement; therefore be it

Resolved, That Article XVIII, Section 2, of the Bylaws of the Medical Society of the State of New York be amended by adding a new paragraph 5 and 6 to read:

"Every component county medical society shall provide for a student membership class. Membership in the student membership class of the component county medical society shall be extended to any student member of the Medical Society of the State of New York who is enrolled in a recognized school of medicine or of osteopathy situated in the county, or who maintains legal residence in the county."

"Student members shall not be subject to the dues or assessments of the county medical society but shall be accorded rights and privileges in the county medical society to include the right to attend membership meetings, to have voice and vote thereat, and to hold elective office."

The Committee is opposed to mandating that the county medical societies create a student classification. The Committee wishes to urge all county medical societies to adopt a student membership category. This, however, does not require a change in the Bylaws.

The Committee, therefore, unanimously recommends **DISAPPROVAL** of Resolution 81-43.

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⟹ . . . *The House voted to* **NOT ADOPT** *Resolution 81-43* . . .

Resolution 80-27, Proposed Revisions of the Principles of Professional Conduct

Introduced by Clifford L. Spingarn, M.D., as an Individual

Whereas, The Speaker of the House of Delegates has requested that a review of the PRINCIPLES OF PROFESSIONAL CONDUCT be made by the House Committee on Bylaws; and

Whereas, The fact that this study of the PRINCIPLES OF PROFESSIONAL CONDUCT has been called to the attention of the Committee on Ethics; and

Whereas, In the spirit of being cooperative with this study, the Council Committee on Ethics has proposed the attached update and revision of the PRINCIPLES OF PROFESSIONAL CONDUCT; therefore be it

Resolved, That the attached draft of the revised PRINCIPLES OF PROFESSIONAL CONDUCT be considered by the House Committee on Bylaws in accordance with Article XX of the Bylaws.

PROPOSED REVISIONS

PRINCIPLES OF PROFESSIONAL CONDUCT

DRAFT

CHAPTER I — *General Principles*

Section 1: The prime object of the medical profession is to render competent medical service with compassion and respect for human dignity.

Section 2: These Principles of Professional Conduct shall apply to doctors of medicine as individuals or as members of staffs of hospitals, clinics, colleges, schools, foundations, companies, partnerships, corporations or groups, by whatsoever name they may be known.

Section 3: The Medical Society of the State of New York does not prohibit the use of advertising when used in making certain information known to the public, which is entitled to know the names of physicians, the types of their practice, the location of their office, their office hours, fixed fees for specified routine professional services, and biographical data that will enable people to make a more informed choice of a physician.

The physician may furnish this information through the accepted local media for advertising; i.e., office signs, professional cards, dignified announcements, telephone directory listings, reputable directories and news media, which are open to all physicians on like conditions.

Solicitation of patients not in the public interest, directly or indirectly by a physician, by groups of physicians, clinics, institutions or organizations, is unethical. Solicitation shall include:

(1) The not always obvious devices of furnishing or inspiring, by use of public relations firms or the news media, comments concerning cases in which the physician, group or institution has been or is concerned;

(2) the use of statements or claims intended or likely to create inflated or unjustified expectations of favorable results;

(3) the use of statements or claims that are self-laudatory and imply that the physician's skills are superior to other physicians engaged in his field or specialty of practice;

(4) offering gratuitous services or discounts in connection with professional services.

Section 4: Doctors of Medicine may provide appropriate information regarding important medical and public health matters which have been discussed during open medical meetings or in technical papers, which have been published, and he may reveal information regarding a patient's physical condition if the patient gives his permission, but he should seek the guidance of appropriate officials and designated spokesmen of component or constituent medical societies. When any sort of medical information is released to the public, the promise of radical cures, or boasting of cures or extraordinary skill or success, is unethical.

Section 5:

(a) The acceptance of rebates on prescriptions or appliances or of commissions from attendants who aid in the care of the patient is unethical.

(b) When a patient is referred by one doctor of medicine to another for consultation or treatment, the offering, giving, soliciting or receiving any fee or other consideration is unethical.

(c) The prescription or dispensing by a doctor of medicine of secret medicines or other secret remedial agents, of which he does not know the composition or the manufacture or promotion of their use, is unethical.

(d) A doctor of medicine shall not have any financial interest in or own a pharmacy or an optical dispensing facility, unless it is established to the satisfaction of the local county medical society that such participation or ownership is necessary to meet the needs of the community.

(e) Drugs, remedies or appliances may be dispensed or supplied by the physician provided it is in the best interests of the patient or in areas where they are not available.

CHAPTER II

Section 1: A doctor of medicine is free to choose whom he will serve. He should respond to any request for his assistance in an emergency.

Section 2: Once having undertaken a case, the doctor of medicine should not neglect the patient, nor should he withdraw from the case without giving notice to the patient and/or his relatives or his guardian sufficiently long in advance of his withdrawal to allow them to secure another medical attendant.

Section 3: The doctor of medicine should safeguard the confidences which he may receive from his patient; this obligation extends beyond the period of professional services. None of the privacies of individual or domestic life, no infirmity of disposition or flaw of character observed during medical attendance, should ever be divulged by doctors of medicine except when required by state law or by the courts.

Section 4: All voluntarily associated activities with cultists are unethical. Such activities lower the honor and dignity of the profession; in the same degree, it elevates the honor and dignity of the cultist.

CHAPTER III

Section 1: Every doctor of medicine should aid in safeguarding the profession against admission to it of those who are deficient in moral character or education.

Section 2: A doctor of medicine should expose, without fear or favor, incompetent or corrupt, dishonest or unethical conduct on the part of members of the profession.

CHAPTER IV

Section 1: Doctors of medicine should request consultations in perplexing cases, and the attending doctor of medicine should cheerfully consent to a consultation when desired by the patient or his representative.

Section 2: All due respect should be observed toward the doctor of medicine in charge of the case and no statement or remark should be made which would unjustly impair the confidence reposed in him.

Section 3: As soon as possible after the consultant has seen the patient, he should address the doctor of medicine in charge and advise him of the results of his investigation. Statements then may be made to the patient and/or his family or guardian in presence of all doctors of medicine concerned or unless another arrangement has been consented to by all physicians involved.

Section 4: The doctor of medicine in charge of the case is responsible for treatment of the patient. Consequently, he may prescribe for the patient at any time and is privileged to vary the treatment outlined and agreed on at a consultation whenever, in his opinion, such change is warranted. However, after such a change, it is best to call another consultation; then the doctor of medicine in charge should state his reasons for departing from the course decided at the previous conference. When an emergency occurs during the absence of the doctor of medicine in charge, a consultant may assume authority until the arrival of the doctor of medicine in charge.

Section 5: It may happen that the attending doctor of medicine and the consultant cannot agree in their views of the case or of the treatment to be pursued; with the consent of the patient another consultant may be called.

Section 6: When a doctor of medicine has acted as consultant in an illness, he should not become the doctor of medicine in charge in the course of that illness, except with the consent of the doctor of medicine who was in charge at the time of the consultation, unless the patient insists on the change.

Section 7: When a doctor of medicine makes social calls on another doctor of medicine's patient, he should avoid conversation about the patient's illness.

Section 8: A doctor of medicine should not take charge of, or prescribe for, another doctor of medicine's patient during any given illness (except in an emergency) until the other doctor of medicine has relinquished the case or has been formally dismissed.

Section 9: When a doctor of medicine does succeed another doctor of medicine in charge of a case, he should not disparage, by comment or insinuation, the one who preceded him. Such comment or insinuation tends to lower the confidence of the patient in the medical profession and so reacts against the patient, the profession, and the critic.

Section 10: When a doctor of medicine is called in an emergency because the personal or family doctor of medicine is not at hand, he should provide only for the patient's immediate need and should withdraw from the case on the arrival of the personal or family doctor of medicine. However, he should first report to the personal or family doctor of medicine the condition found and the treatment administered.

Section 11: Whenever a doctor of medicine requests another doctor of medicine to attend his patients during his temporary absence from his practice, professional courtesy requires the acceptance of such appointment if consistent with his other duties. The doctor of medicine acting under such an appointment should give the utmost consideration to the interests and reputation of the absent doctor of medicine. All such patients should be restored to the care of the latter upon his return.

CHAPTER V

Section 1: A doctor of medicine should not dispose of his services under conditions that make it impossible to render adequate service to his patients, except under circumstances in which the patient concerned might be deprived of immediately necessary care.

Section 2: Contract practice as applied to medicine means the practice of medicine under an agreement between a duly licensed doctor of medicine or a group of doctors of medicine, as principals or agents, and a corporation, organization, political subdivision, or individual, whereby partial or full medical services are provided for a group or class of individuals on the basis of a fee schedule, or for salary or for a fixed rate per capita. Contract practice per se is not unethical. Contract practice is unethical if it permits of features or conditions that are declared unethical in these Principles of Professional Conduct or if the contract or any of its provisions causes deterioration of the quality of the medical services rendered. Contract practice which allows diversion of fees for professional medical services to a hospital, organization, or political subdivision is unethical.

Section 3: It is not unethical for a fee to be prorated among two or more doctors of medicine when such physicians have actively participated in the medical and/or surgical care of a patient and each physician's fee is commensurate with the services he had rendered. The patient who has received such joint services shall be advised of the participation of each physician and shall receive a separate, itemized statement from each.

CHAPTER VI

Section 1: Doctors of medicine, as good citizens, possessed of special training, should promote the health of the community wherein they dwell. They should bear their part in enforcing the laws of the community and in sustaining the institutions that advance the interests of humanity. They should cooperate especially with the proper authorities in the administration of sanitary laws and regulations.

Section 2: Doctors of medicine should enlighten the public concerning quarantine regulations and measures for the prevention of epidemic and communicable diseases. At all times the doctor of medicine should notify the constituted public health authorities of every case of communicable disease under his care, in accordance with the laws, rules, and regulations of the health authorities. When an epidemic prevails, a doctor of medicine must continue his labors without regard to the risk of his own life.

Enforcement of the Principles of Professional Conduct

Component county medical societies should cooperate with the properly constituted authorities in the enforcement of the laws of the State of New York and of their respective localities relating to the public health and to the practice of medicine and should report promptly to such authorities any evidence received by them indicating any violation of such laws. The commission of an act or acts by a doctor of medicine which would subject him to reprimand or discipline or which would subject his license to practice medicine to revocation, suspension, or annulment shall constitute a violation of these Principles of Professional Conduct.

Amendments or Alterations

Any component county medical society may adopt other or amend or alter these regulations respecting professional conduct, binding only upon its own members if not inconsistent or in conflict with these Principles of Professional Conduct, or with the Bylaws of the Medical Society of the State of New York.

Enforcement, Discipline, and Punishment

Each component county medical society is charged with the duty of carrying out and enforcing, within its jurisdiction, the terms and provisions of these Principles of Professional Conduct. Any breach or infraction of any one or more of the terms or provisions of these Principles of Professional Conduct, or of any one or more of the terms or provisions of any further or additional regulations respecting professional conduct adopted as herein provided by any component county medical society shall subject the offender to and shall be sufficient cause for discipline. Each component county medical society, through bylaws provisions adopted in accordance with its own constitution and bylaws, and in accordance with the Bylaws of the Medical Society of the State of New York, shall (a) fix and determine the degree or degrees of discipline and the nature and extent of the penalty or punishment which may be imposed and shall (b) adopt its own rules and regulations of methods and procedure respecting all disciplinary investigations, proceedings, and action. Interpretations and rulings of each component county medical society with respect to these Principles of Professional Conduct or with respect to any further and additional regulations respecting professional conduct adopted by it as herein provided shall be binding upon its members until modified, revised, or reversed upon appeal by the Medical Society of the State of New York, or by a court of competent jurisdiction.

APPENDIX I

The Oath

I swear by Apollo the physician and Aesculapius and Hygeia and Panacea and all the gods and goddesses that according to my ability and judgment I will keep this Oath and this stipulation — to reckon him who taught me this Art equally dear to me as my parents — to share my substance with him and relieve his necessities if required — to look upon his offspring in the same footing as my own brothers and to teach them this Art if they shall wish to learn it without fee or stipulation — and that by precept, lecture and every other mode of instruction, I will impart a knowledge of the Art to my own sons and those of my teachers and to disciples bound by a stipulation and oath, according to the Law of Medicine, but to none others.

I will follow the system of regimen which according to my ability and judgment I consider for the benefit of my patients and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to anyone if asked nor suggest any such counsel; and in like manner I will not give to a woman a pessary to produce abortion. With purity and with holiness I will pass my life and practice my Art. I will not cut persons laboring under the stone but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick and will abstain from every voluntary act of mischief and corruption, and further from the seduction of females or males, of freemen and slaves. Whatever in connection with my professional practice or not in connection with it I see or hear in the life of men which ought not to be spoken of abroad I will not divulge, as reckoning that all such should be kept secret.

While I continue to keep this Oath unviolated, may it be granted to me to enjoy life and the practice of the Art respected by all men in all times. But should I trespass and violate this Oath, may the reverse be my lot.

Hippocrates
(460–357 B.C.)

Prayer

I begin once more my daily work. Be thou with me, Almighty Father of Mercy, in all my efforts to heal the sick. For without Thee, man is but a helpless creature. Grant that I may be filled with love for my art and for my fellowmen. May the thirst for gain and the desire for fame be far from my heart. For these are the enemies of Pity and the Ministers of Hate. Grant that I may be able to devote myself, body and soul to thy children who suffer from pain.

Preserve my strength, that I may be able to restore the strength of the rich and the poor, the good and the bad, the friend and the foe. Let me see in the sufferer the man alone. When wiser men teach me, let me be humble to learn, for the mind of man is so puny and the art of healing is so vast. But when fools are ready to advise me or to find fault with me, let me not listen to their folly. Let me be intent upon one thing, O Father of Mercy, to be always merciful to thy suffering children.

May there never rise in me the notion that I know enough, but give me strength and leisure and zeal to enlarge my knowledge. Our work is great and the mind of men presses forward forever. Thou has chosen me in thy grace, to watch over the life and death of Thy creatures. I am about to fulfill my duties. Guide me in this immense work so that I may be of avail.

Maimonides
(1135–1204 A.D.)

Declaration of Geneva

At the Time of Being Admitted as Member of the Medical Profession:

I solemnly pledge myself to consecrate my life to the service of humanity.

I will give to my teachers the respect and gratitude which is their due.

I will practice my profession with conscience and dignity.

The health of my patient will be my first consideration.

I will respect the secrets which are confided in me.

I will maintain by all means in my power, the honor and the noble traditions of the medical profession.

My colleagues will be my brothers.

I will not permit considerations of religion, nationality, race, party politics or social standing to intervene between my duty and my patient.

I will maintain the utmost respect for human life, from the time of conception; even under threat, I will not use my medical knowledge contrary to the laws of humanity.

I make these promises solemnly, freely, and upon my honor.

Adopted by the General Assembly of the World Medical Association at Geneva, Switzerland, September, 1948.

The House Committee on Bylaws decided to accept the proposed revisions to the Principles of Professional Conduct as submitted by the Ethics Committee of the Medical Society of the State of New York as a substitute to Resolution 80-27. The proposed revisions provide:

CHAPTER I

GENERAL PRINCIPLES

Section 1: The prime object of the medical profession is to render competent medical service with compassion and respect for human dignity.

Section 2: These principles of professional conduct shall apply to doctors of medicine as individuals or as members of staffs of hospitals, clinics, colleges, schools, foundations, companies, partnerships, corporations or groups, by whatsoever name they may be known.

Section 3: The medical profession should safeguard the public and itself by exposing those physicians deficient in moral character or professional competence or who engage in illegal or unethical conduct.

Section 4: A doctor of medicine shall respect the rights of colleagues.

Section 5: Doctors of medicine should strive continually to improve medical knowledge and skill. They can promote the health of their community by their contributions and by cooperating with the proper authorities in the administration of sanitary laws and regulations.

Section 6: Any conduct that results in the provision of unnecessary services or overutilization of services or facilities is unethical.

CHAPTER II

SPECIFIC PRINCIPLES

Section 1: A doctor of medicine is free to choose whom he will serve, except in the case of an emergency.

Section 2: Once having undertaken a case, the doctor of medicine should not neglect the patient nor should he withdraw from the case without giving adequate notice to the patient and/or relatives or guardian.

Section 3: The doctor of medicine should safeguard the patient's confidences within the constraints of the law.

Section 4: Doctors of medicine should request consultations when necessary or upon request of patient and/or family.

Section 5:

(a) The acceptance of rebates on prescriptions or appliances or of commissions from attendants who aid in the care of the patient is unethical.

(b) When a patient is referred by one doctor of medicine to another for consultation or treatment, the offering, giving, soliciting or receiving any fee or other consideration is unethical.

(c) It is not unethical for a fee to be prorated among two or more doctors of medicine when such physicians have actively participated in the medical and/or surgical care of a patient and each physician's fee is commensurate with the services he had rendered. The patient who has received such joint services shall be advised of the participation of each physician and shall receive a separate, itemized statement from each.

Section 6:

(a) The prescription or dispensing by a doctor of medicine of secret medicines or other secret remedial agents, of which he does not know the composition or the manufacture or promotion of their use, is unethical.

(b) In owning a commercial medical facility for adjunct treatment purposes, a physician must keep the primary benefit of the patient in mind and such ownership should not result in overutilization for profit motives. Such ownership or participation must be approved by the local county medical society.

(c) Drugs, remedies or appliances may be dispensed or supplied by the physician provided it is in the best interests of the patient or in areas where they are not available.

Section 7: A physician who has experienced problems with delinquent accounts may properly choose to request that payment be made at the time of treatment or add interest or other reasonable charges to delinquent accounts. The patient must be notified in advance of the interest or other finance or service charges by such means as the posting of a notice in the physician's waiting room or appropriate notations on the billing statement. The physician must comply with state and federal laws and regulations applicable to the imposition of such charges, i.e., the Truth in Lending Law.

Section 8: The attending physician should complete without charge the appropriate "simplified" insurance claim forms as a part of his service to the patient to enable the patient to receive his benefits. A charge for more complex forms may be made.

CHAPTER III

ADVERTISING

The Medical Society of the State of New York does not prohibit the use of advertising when used in making certain information known to the public, provided that the communication shall not be misleading, shall not contain any false or misleading statements and shall not deceive the public.

The public is entitled to know the names of physicians, their office hours, fixed fees for specified routine professional services and biographical data which will enable people to make a more informed choice of a physician. The physician may furnish this information through the accepted local media for advertising, i.e., office signs, professional cards, dignified announcements, telephone directory listings, reputable directories and news media, which are open to all physicians on like conditions.

Uninvited or in person solicitation of actual or potential patients, who because of their particular circumstances are vulnerable to undue influence, is unethical. Solicitation shall include:

(1) The not always obvious devices of furnishing or inspiring, by use of public relations firms or the news media, comments concerning cases in which the physician, group or institution has been or is concerned:

(2) the use of statements or claims intended or likely to create inflated or unjustified expectations of favorable results;

(3) the use of statements or claims that are self-laudatory and imply that the physician's skills are superior to other physicians engaged in his field or specialty of practice.

CHAPTER IV

CONTRACT MEDICINE

There are various financial or contractual arrangements that physicians may enter into. Medical care should not be subjected to lay interference on professional matters. The primary responsibility of physicians should be to the patients they serve.

AMENDMENTS OR ALTERATIONS

Any component county medical society may adopt other or amend these regulations respecting professional conduct, binding only upon its own members if not inconsistent or in conflict with these Principles of Professional Conduct, or with the Bylaws of the Medical Society of the State of New York.

ENFORCEMENT, DISCIPLINE, AND PUNISHMENT

Each component county medical society is charged with the duty of carrying out and enforcing, within its jurisdiction, the terms and provisions of these Principles of Professional Conduct. Any breach or infraction of any one or more of the terms or provisions of these Principles of Professional Conduct, or of any one or more of the terms or provisions of any further or additional regulations respecting professional conduct adopted as herein provided by any component county medical society, shall subject the offender to and shall be sufficient cause for discipline. Each component county medical society, through bylaws provisions adopted in accordance with its own constitution and bylaws and in accordance with the Bylaws of the Medical Society of the State of New York, shall (a) fix and determine the degree or degrees of discipline and the nature and extent of the penalty or punishment which may be imposed and shall (b) adopt its own rules and regulations of methods and procedure respecting all disciplinary investigations, proceedings, and action. Interpretations and rulings of each component county medical society with respect to these Principles of Professional Conduct or with respect to any further and additional regulations respecting professional conduct adopted by it as herein provided shall be binding upon its members until modified, revised, or reversed upon appeal by the Medical Society of the State of New York, or by a court of competent jurisdiction.

APPENDIX I

The Oath

I swear by Apollo the physician and Aesculapius and Hygeia and Panacea and all the gods and goddesses that according to my ability and judgment I will keep this Oath and this stipulation — to reckon him who taught me this Art equally dear to me as my parents — to share my substance with him and relieve his necessities if required — to look upon his offspring in the same footing as my own brothers and to teach them this Art if they shall wish to learn it without fee or stipulation — and that by precept, lecture and every other mode of instruction, I will impart a knowledge of the Art to my own sons and those of my teachers and to disciples bound by a stipulation and oath, according to the Law of Medicine, but to none others.

I will follow the system of regimen which according to my ability and judgment I consider for the benefit of my patients and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to anyone if asked nor suggest any such counsel; and in like manner I will not give to a woman a pessary to produce abortion. With purity and with holiness I will pass my life and practice my Art. I will not cut persons laboring under the stone but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick and will abstain from every voluntary act of mischief and corruption, and further from the seduction of females or males, of freemen and slaves. Whatever in connection with my professional practice or not in connection with it I see or hear in the life of men which ought not to be spoken of abroad I will not divulge, as reckoning that all such should be kept secret.

While I continue to keep this Oath unviolated, may it be granted to me to enjoy life and the practice of the Art respected by all men in all times. But should I trespass and violate this Oath, may the reverse be my lot.

Hippocrates
(460–357 B.C.)

Prayer

I begin once more my daily work. Be thou with me, Almighty Father of Mercy, in all my efforts to heal the sick. For without Thee, man is but a helpless creature. Grant that I may be filled with love for my art and for my fellowmen. May the thirst for gain and the desire for fame be far from my heart. For these are the enemies of Pity and the Ministers of Hate. Grant that I may be able to devote myself, body and soul to thy children who suffer from pain.

Preserve my strength, that I may be able to restore the strength of the rich and the poor, the good and the bad, the friend and the foe. Let me see in the sufferer the man alone. When wiser men teach me, let me be humble to learn, for the mind of man is so puny and the art of healing is so vast. But when fools are ready to advise me or to find fault with me, let me not listen to their folly. Let me be intent upon one thing, O Father of Mercy, to be always merciful to thy suffering children.

May there never rise in me the notion that I know enough, but give me strength and leisure and zeal to enlarge my knowledge. Our work is great and the mind of men presses forward forever. Thou has chosen me in thy grace, to watch over the life and death of Thy creatures. I am about to fulfill my duties. Guide me in this immense work so that I may be of avail.

Maimonides
(1135–1204 A.D.)

Declaration of Geneva

At the Time of Being Admitted as Member of the Medical Profession:

I solemnly pledge myself to consecrate my life to the service of humanity.

I will give to my teachers the respect and gratitude which is their due.

I will practice my profession with conscience and dignity.

The health of my patient will be my first consideration.

I will respect the secrets which are confided in me.

I will maintain by all means in my power, the honor and the noble traditions of the medical profession.

My colleagues will be my brothers.

I will not permit considerations of religion, nationality, race, party politics or social standing to intervene between my duty and my patient.

I will maintain the utmost respect for human life, from the time of conception; even under threat, I will not use my medical knowledge contrary to the laws of humanity.

I make these promises solemnly, freely, and upon my honor.

Adopted by the General Assembly of the World Medical Association at Geneva, Switzerland, September, 1948.

The House Committee on Bylaws unanimously believes that under the substitute proposal, the Principles of Professional Conduct will be more concise, while the pertinent principles will remain intact.

The Committee, therefore, recommends **APPROVAL** of the substitute proposal for Resolution 80-27.

In considering the substitute resolution for Resolution 80-27, a motion was introduced to divide the question and vote on each Chapter and the Appendix of the Principles of Professional Conduct separately.

The Speaker ruled that the House consider each Chapter and the Appendix separately.

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⟹ . . . *The House voted to* **ADOPT** *Chapter 1, Chapter 2, Chapter 3, and Chapter 4 of the Principles of Professional Conduct . . .*

⟹ . . . The House voted to add the following statement to the Appendix of the Principles of Professional Conduct:

> The Hippocratic Oath, Maimonides Prayer, and the Declaration of Geneva are appended to the Principles of Professional Conduct for historical purposes.

⟹ . . . *The House voted to* **ADOPT** *the substitute resolution for Resolution 80-27, as acted upon by the House . . .*

This report would not be complete unless your chairman offered a tribute to the late J. Richard Burns, J.D. As General Counsel, Mr. Burns provided this Committee with much needed advice and guidance.

Your chairman would like to thank, in addition to the members of the Committee and the physicians who testified before it, those members of the staff who aided this Committee; Donald R. Moy, J.D., General Counsel, and Mrs. Joan Grimm and Ms. Barbara Lacey, who provided their secretarial assistance to the Committee.

Respectfully submitted,

Edgar P. Berry, M.D., *Chairman*

REPORTS OF OFFICERS

PRESIDENT

Mr. Speaker, members of the House of Delegates, honored guests:

It is my intention this afternoon to abandon the traditional subject matter of the year-end presidential address, and devote my allotted time to the one issue which assumes primacy among the physicians of our Society — namely, the failure to resolve satisfactorily the professional liability problem. I will attempt, hopefully, to update the situation, clarify some of the issues, dispel some myths, and suggest a possible blueprint for the future.

Let me start with legislative activity. The New York State Medical Society has not abandoned its seminal role in exerting legislative pressures for tort changes. We have a tendency to forget that very meaningful changes were effectuated through the efforts of MSSNY. For instance, we have one of the best statutes of limitations in the country. The absolute collateral source statute is duplicated in no other jurisdiction. The rules governing informed consent have been modified in our favor. Other changes have had a lesser impact, but on balance have been favorable.

No one, however, can be satisfied with this record. We have been singularly unsuccessful in our attempt to cap the contingent liability of the physicians or to spread the risk. In addition, we must candidly admit that the "crisis atmosphere" so necessary to move a legislature distracted by scores of other issues has virtually disappeared with the advent of "Claims Made" insurance and a bureaucratic failure to recognize that professional liability insurance reserves are not adequate to meet the potential economic losses 8 to 10 years in the future.

What then may we expect in the coming years? For the immediate time frame of perhaps one year we expect very little to happen legislatively. Beyond that there may be reason for optimism because of several events which have transpired in the past year. Just about the time that our Medical Catastrophe Fund bill was in its death throes, a new organization, the Medical Liability Reform Coalition, was being formed by many of the organizations that were so opposed to our fund concept. They have finally, to their credit, come to the realization, so long espoused by MSSNY, that the present system of dealing with professional negligent liability was breaking down and had to be dealt with. The Alliance of American Insurers plays a central role in the coalition, and the Medical Society has now become a full partner.

Our legislative lobbyist is heading the coalition effort to write appropriate statutes on medical liability tort reform to be offered to the legislature. The strategy for the Society now is to continue to offer recommendations for tort changes, as in the past, but as an equal partner in the newly formed coalition. We hope that this alliance can create the environment necessary for change.

The second event is the Manville petition for bankruptcy. This has engendered an outpouring of editorial comment across this land, the majority of which recognizes the failure of the adversarial tort liability system to address itself fairly to injured parties. The case has dramatically driven home to the American public that the present methodology rewards the legal system far more than the injured parties. Almost all the editorials call for some form of a compensation fund with a fair and equitable schedule of awards. Although I have serious reservations about this concept, as to its ultimate cost and who shall bear it, it is a mechanism which must be seriously addressed and looked into. What may have been unthinkable in the past may now be a modality whose time has come.

Let me now turn to an area that appears to be of more immediate concern — the relationship between the Medical Liability Mutual Insurance Company (MLMIC) and the Medical Society of the State of New York (MSSNY). Historically, MLMIC was born out of the ashes of the nonavailability of professional liability insurance at any cost. There is no debate about the parenthood of MLMIC. What appears to be of issue now is whether the bonding between the two organizations is too close. There are those who feel that the relationship is so incestuous that neither organization is free to indulge in unfettered criticism of the other, or make demands of the other. I am absolutely convinced, without fear of contradiction, that the goals and aspirations of both organizations are identical — to do what is best for the overwhelming majority of the physicians of this State.

The problem arises out of the fact that MLMIC must function as a member of one of the most highly regulated industries in the state supervised by a department that is frequently hostile. Its options are limited. However, within the constraints, both legal and fiscal, under which it performs, I firmly believe that MLMIC conducts its affairs in the best interest of the physicians of the State. The Medical Society, on the other hand, is not bound by the Insurance Department's bureaucratic entanglements and need only follow its own best judgments after prudent debate. It is free to bring up ideas, options and criticisms for the MLMIC Board to consider. The Society does this frequently, and well it should. It is tortured logic to suggest that physicians would be better off if MLMIC's Board were totally divorced from the policy-making bodies of MSSNY. If that were done, the MLMIC Board would still be constrained to function under the limitations previously described, but would have to do so with little or no input from knowledgeable and concerned members of MSSNY, who recognize the commonality of purpose. In truth, the election of members of our policy-making bodies should rest not on where they come from, but on commitment, talent, intelligence and total command of the issues.

Another area of concern for many of our physicians has to do with MLMIC's huge accumulation of reserves, rapidly approaching the billion dollar mark. It is absolutely proper to question the necessity of those reserves and I have done so on many occasions. Let us candidly admit that this mind-boggling sum is nothing more than the end product of a highly sophisticated actuarial guessing game as to what the incurred liabilities of the company will be within a given time frame. Like the fable of "Goldilocks," this sum may be too high, too low, or just right. What it really means is that, if we stopped writing premiums tomorrow, in 12 to 15 years all of our reserves would probably be dissipated. To put it another way, the only time we will actually know that our reserving policies have been correct is when every single claim and all the allocated loss expenses attendant upon these claims for a given policy year have been expended.

For those who feel that the demise of the company will serve the best interests of our physicians, I can only repeat what I have said on many occasions during my tenure as President — the company is *not* the enemy — the system *is*. If the demise of the company were the answer to our problems, I would be delighted to attend its wake. But it is *not*.

No one is more frustrated than I in the inability to turn this onerous professional liability situation around. We are an exceedingly impatient lot. But we must not abandon our efforts and we will not. Let us not forget who our friends are and let us continue to work with them, not against them. This does not mean a slavish, uncritical role, but rather constructive criticism from a well-informed constituency. A final note. It is sad that so much of our effort must be directed toward this most serious socioeconomic problem, instead of allowing the major efforts of this society to be directed toward the role of the betterment of patient care and patient advocacy — a role which we should never forget — as our prime reason for being.

One tradition I will not abandon. Not because it is something I must do but because it is deserved. With heartfelt sincerity, this past year's successes, however small they may be, are due in large part to our staff at MSSNY, the members of the Council and our committees. The physicians of this Society and I owe them a debt of gratitude. It has been the highlight of my professional career to have been privileged to serve you. God bless you all.

Respectfully submitted,
Milton Rosenberg, M.D., *President*

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

Your reference committee reviewed the annual report of the President, and commends Dr. Rosenberg for his vigorous and skilled service to the Society during this past year. We particularly note and appreciate his strong fight on our behalf in the on-going struggle to ameliorate the medical liability insurance crisis. The reference committee agrees with Dr. Rosenberg's position that the Society continue to offer recommendations for tort reform, as in the past, but as an equal partner in the newly formed Medical Liability Reform Coalition. We hope that this alliance creates a favorable climate for necessary change. We concur with his urging that the MSSNY continue close association with the Board of the Medical Liability Mutual Insurance Company. We appreciate Dr. Rosenberg's dynamic leadership on behalf of the members of our Society during his tenure as President.

⟹ Your reference committee recommends that the report of the President be filed for information.

⟹ . . . *The report of the President was* **FILED FOR INFORMATION** . . .

SECRETARY (ANNUAL)

To the House of Delegates, Ladies and Gentlemen:

The Secretary reports as follows for the year 1981–1982.

House of Delegates. An edited version of the minutes of the 1981 House of Delegates' meeting was transmitted to the New York State Journal of Medicine and was published in the March, 1982, issue, Vol. 82, No. 4. Verbatim minutes of the 1981 annual meeting of the House are on file at the headquarters office. Matters referred by the House of Delegates to the Council were reported to the Council by the Secretary in November, 1981. Instructions of the House of Delegates were referred by the executive vice-president to the appropriate officers, committee chairmen, division directors, and other persons. A "Resume of Instructions from the 1981 House of Delegates and Actions Thereon by the Council, Board of Trustees, Executive Committee, Officers, Council Committees, and Governmental Agencies" is being prepared and will be presented to the 1982 House of Delegates. It will record the final disposition of the instructions of the House as reported at the time of preparation of the annual reports.

Council, Executive Committee, and Board of Trustees. The Secretary has sent notices of the meetings of the Council, the Board of Trustees, and the Executive Committee and has also reported Executive Committee actions to the Council.

Membership. At its meetings in November and December, 1981, and January, February, March, April, May, and June, 1982, the Council approved requests by county medical societies, presented by the Secretary, for remission of dues of 142 members because of illness, financial hardship, and military service. Membership figures for the period ending August 31, 1982, will be presented in the supplementary report. They will reflect any additional dues remissions approved by the Council in September and October, 1982, as well as the 142 mentioned above.

The Medical Society of the State of New York received notices from county medical societies recommending that these physicians be excused from fulfilling CME requirements. At the meetings of the Council in November, and December, 1981, and January, March, April, May, and June, 1982, the Council approved CME exemptions for 40 physicians because of illness or permanent disability.

From November, 1981, through June, 1982, the county medical societies submitted, and the Secretary presented to the Council, the names of 287 applicants for election to life membership, and the Council elected them at the meetings of November and December, 1981, and January, February, March, April, May, and June, 1982. The list of life members elected during the above stated period follows:

Jules B. Aaron, Lighthouse Point, Fla.
Louis Aibel, Brooklyn
Roy G. Aiello, Brooklyn
Ernest C. Alexander, Jackson Heights
Kenneth M. Alford, Buffalo
Jona Allerhand, Elmhurst
Albert D. Anderson, The Bronx
Hyman Ashman, New York

Edward Bader, The Bronx
Andrew Baeder, New York
Theodore A. Ballien, Albany
Jacques J. Bardavid, New York
John B. Barnell, Rochester
Rela Bartfeld, New York
Arthur Barth, White Plains
Louis C. Battista, Watertown
E. Deland Battles, Waterville
Charles H. Bauer, New York
David W. Bauer, Surfside, Fla.
Benjamin J. Becker, Forest Hills
Jacob Begner, New York
Julius Belinkoff, New York
Alfred Berl, Bullville
Arthur Biezunski, Forest Hills
Dallas Billman, Corning
Williard J. Blauvelt, Auburn
Arthur I. Blieden, New York
Samuel Bloom, Bricktown, N.J.
Irving J. Blumenthal, Wantagh
Frederick B. Bohensky, Cranbury, N.J.
Mario Bonaquist, Schenectady
Philip Bond, Port Washington
Abraham G. Borden, Port Washington
Philip Bourland, Old Greenwich, Ct.
Harvey Brandon, New York
Winona Brannan, Wappinger Falls
Jacob Buchbinder, Brewster
John J. Buckley, Stamford, Ct.
Gordon H. Burgess, Buffalo
Daniel G. Butera, Brooklyn

Daniel Cahill, South Ozone Park
Carmelo P. Cancellieri, Southampton
Dominick J. Carlisi, Flushing
Anthony S. Catinella, Batavia
Nicholas Cea, The Bronx
Jacqueline Chang, Syosset
Martin Cherkasky, The Bronx
Joseph Chess, Larchmont
Ralph V. Chester, Syracuse
Moe Harry Cohen, Mt. Vernon
Samuel J. Cohen, Flushing
Benjamin Coleman, Kew Gardens
Robert P. Coolidge, Duanesburg
Marianno Cooper, Glen Cove
Gordon J. Culver, Eggertsville
Robert A. Currie, Jr., Geneva

Theodore Davidoff, Blauvelt
Elvira De Liee Burke, Yonkers
Barnet Delson, Roslyn Heights
Richard F. Dietz, Flushing
Edmund Diller, Brooklyn
Samuel A. Dispenza, Jamestown
Joseph Dolgin, Staten Island
Martin Dollin, Kew Gardens
Jacob Dorfman, Mineola
Duane H. Dougherty, Carefree, Az.
Alice Dunajewski, Ozone Park
Joseph E. Dygert, Pittsford

Ralph S. Emerson, Roslyn Heights
Alfred Englander, Delray Beach, Fla.
Stiles D. Ezell, Salem

Carl P. Faso, Lackawanna
John A. Fatcheric, Syracuse
Harold R. Feinstein, Floral Park
J. S. Feynman, Saratoga Springs
Egon E. Fisher, Auburn
Maria F. Fleischl, New York
Isaac Frankel, Riverhead
Jesse M. Frankel, Brooklyn
John E. Franklin, New York
Isidore Freed, Roslyn Heights
Walter Freund, Oswego
Lester Friedman, Jamaica

Frank Gagan, Poughkeepsie
Harold Garnes, St. Albans
Karl A. Garten, Niagara Falls
William A. Gaspar, Malone
Samuel B. Gelmann, New York
Isadore E. Gerber, New York
David G. Gerof, Lawrence
Walter Ray Gillette, Waverly
George L. Gilmore, Venice, Fla.
Gino L. Giorgini, Copaigue
Harold A. Goldberg, New Hyde Park
Natalie D. Goldberg, Brooklyn
Irving Goldblatt, Royal Palm Beach, Fla.
Jacob W. Goldstein, Lawrence
Philip Goldstein, The Bronx
Albert A. Goodman, The Bronx
E. Raymond Goodrich, Sun City West, Az.
Morris Gordon, Yonkers
John J. Grande, New York
Frank A. Graniero, Utica
Roger M. Grayson, Ann, Jamaica, W.I.
John J. Greco, Brooklyn
Louis Green, Jackson Heights
Nathan M. Greenstein, The Bronx
Edith Gutman, Whitestone

Henry Haimovici, New York
Milly G. Halberstadt, Malone
Errol N. Harding, East Hampton
Maxwell Harrison, Jamaica
Edwin A. Haverty, White Plains
William W. Henderson, Niagara Falls
Alfons Hillel, The Bronx
Hildegard Hirsch, Geneva
Frank C. Hoak, Kenmore
Cranston W. Holman, New York
Max N. Howard, New York
Robert J. Hubbard, Brooklyn
Daniel Hyman, Suffern

Zohora Ismail, New York

Jerome L. Jacoby, Flushing
Donald S. James, Boca Raton, Fla.
Casimir G. Jenczeski, Buffalo
Cecelia E. Jett-Jackson, Palisades

Samuel Kampf, Scarsdale
Leo Karron, Queens Village
Eugene Kaskiw, Rome
Marek Kaplan, Endicott
Robert Kassan, Pompano Beach, Fla.
Edward A. Kearney, Newburgh
James S. Kime, Buffalo
Leo Kleban, Rego Park
Egon Kleinman, Eastchester
David L. Koch, Venice, Fla.
Lawrence Kolb, Glenmont
Joseph M. Koreen, Greenlawn
Edward J. Kormors, New York
Irving Kossack, Floral Park
Charles B. Kraus, Kew Gardens
Mavina W. Kremer, New York
Edith L. Kristeller, New York
Leo N. Kuczmarski, Amherst
Karel Kumerman, Valley Cottage

Alfred Lachterman, Scarsdale
Frank Lamberta, Jamaica
Vito LaRocca, The Bronx
Merny Laster, Baldwin
Bernhard Lauber, Jackson Heights
George J. Lawrence, Jr., Glen Cove
Alfred E. Lazar, Hartsdale
Otto Leder, Big Flats
Louis S. Levenstein, Tamarac, Fla.
Erwin Levy, New York
David O. Linder, Belle Harbor
John G. Lipani, Brooklyn
William F. Lipp, Buffalo
Charlotte B. Lissauer, The Bronx
Francis LoGalbo, Kingston
George Looser, Nyack
Lucile Loseke, New York
Vito Luongo, Brooklyn

Joseph E. MacManus, Buffalo
Robert Mainzer, Brooklyn
John F. Maloney, New York
Maurice Maltinsky, Rochester
Charles C. Mangi, Forest Hills
Stanley M. Mark, Bayside
Charles R. Marks, Beechhurst
Samuel Marritt, New York
Rudolph J. Martin, Ticonderoga
Max N. Marvin, Delray Beach, Fla.
Raymond A. Maslyn, Schenectady
Michael A. Mastrianni, Glens Falls
Robert M. Matthews, Amherst
Joseph M. Matturri, Pelham Manor
Michael R. Mazzei, Staten Island
Mary Elizabeth Mercer, Nyack
Joseph C. Messina, Delray Beach, Fla.
Fritz F. Mevs, Lockport
Raymond Meyers, Buffalo
Stanley T. Michael, Ossining
Max Miller, New York
George C. Mueller, Montauk

Leo J. Murphy, Cuba

Max Needleman, New York
Charles Neuhardt, Bronxville
Robert A. Newburger, Scarsdale
William C. Niesen, Lewiston
Donald E. Nitchman, Scotia
Abraham Novinsky, Waverly

H. Robert Oehler, Buffalo
Milton H. Okun, Greenwich, Ct.
Santo Olivia, Deer Park
John A. Olivet, Kingston

Nicholas Panin, Rockville Centre
Albert D. Parets, New York
G. Hertford Parks, Woodbury, Conn.
John M. Patrissi, The Bronx
Eleanor Peck, Poughkeepsie
Ottavio Pellitteri, Oradell, N.J.
Irving I. Perlmutter, Rochester
Orlando J. Pesar, Rochester
Henry Peskin, Scarsdale
Charles W. Petenyi, Plattsburgh
A. Winifred Phillips, New York
Manderson W. Phillips, Malone
William R. Phillips, Pine City
Donald W. Preston, Hamburg
Frank J. Prisco, Floral Park

Alexius Rachun, Ithaca
Joseph A. Rao, Teaneck, N.J.
Hilda Ratner, Beechhurst
Paul F. Reich, Binghamton
Theodore Rimai, Poughkeepsie
Guy F. Robbins, New York
John R. Roche, Roslyn Heights
Harold W. Rosenberg, Scarsdale
Livia H. Rosenfeld, New York
Mortimer Rosenfeld, Brooklyn
Randolph Rosenthal, Woodmere
Kalman D. Rosner, Elmhurst
Solomon Rosokoff, Tonawanda
Eugene Roth, Kew Gardens
Nathan Roth, New York
Allan A. Rubenstein, Lauderhill, Fla.
Joshua Rubenstein, Brooklyn
Arthur Rubin, Palm Beach, Fla.
Jack L. Rubins, Queens Village

Alfred Santillo, Staten Island
Maria Naples Sarno, Syracuse
Mary C. Saxe, Rochester
Samuel L. Scher, New York
Maxwell C. Scherzer, Forest Hills
Edward Schneider, Hartsdale
Jacob Schnitman, Valhalla
Julius Schoenfeld, Brooklyn
Sidney J. Schreiber, Brooklyn
Saul A. Schwartz, The Bronx
Olga Schweizer, Somers
David Schrieber, Lido Beach
John B. Scott, Newburgh
Homer M. Servoss, Jamestown
Edward Shaen, Albany
Edward B. Shapero, New York
Frank Shapiro, Sinclairville
Benjamin G. Shafiroff, Brooklyn

Edward E. Sheldon, New York
Robert J. Shelmandine, Sharon Springs
Joseph S. Sidoti, Staten Island
Henry Siegel, White Plains
Sydney M. Simon, Yonkers
Joseph I. Singer, Hollywood, Fla.
Charles M, Single, Wolcott
Alexander Slepian, Niagara Falls
Bernard H. Smith, Buffalo
Perrin B. Snyder, New York
Ruth E. Snyder, New York
Maxwell Soiffer, Fresh Meadows
Jack Spivak, Jamaica
Edwin Y. Stanton, Flushing
Oliver J. Steiner, Williamsville
John H. Stelter, Geneva
George M. Stephens, Jersey City, N.J.
Leon B. Stern, New York
Sonia S. Stirt, New York
Charles Stolz, New York

Milton Tarlau, Forest Hills
Daniel Paul Tausig, Great Neck
Herbert Teichner, MacDougall
Harry R. Tollefsen, New York
David A. Tutrone, Massapequa

Bella S. Van Bark, New York

Morgan Weber, Setauket
Zoltan Weinberger, Rochester
Emery Weisz, Ridgewood
William J. Welch, New York
Jack J. Wiener, Monsey
Leon I. Wiesel, Sarasota, Fla.
Henry Wigderson, Forest Hills
Abraham D. Workman, Staten Island
Clifford C. Wray, Watertown

J. Allen Yager, New York
George S. Young, Batavia

Ernest G. Zavisca, Buffalo
Philip A. Zoller, Brooklyn

The Secretary's supplementary report will list life members elected in September and October, 1982.

Meetings. The Secretary has attended meetings of the Council, the Executive Committee, the Board of Trustees, and the AMA House of Delegates, as well as meetings of the Professional Medical Liability Insurance and Defense Board. As an ex-officio member of all committees I attended many committee meetings throughout my tenure.

Other Matters. As required by the Bylaws, the Secretary has kept minutes of the House of Delegates, the Council, the Executive Committee, the Board of Trustees, and the Judicial Council, including verbatim records of the proceedings of the House of Delegates and the Judicial Council and a tape recording of the proceedings of the Council, and has also kept files of the correspondence resulting from the meetings of the House of Delegates, the Council, the Executive Committee, and the Board of Trustees. Records and correspondence relating to actions of the Judicial Council are kept in the office of the General Counsel. The Secretary is custodian of the seal of the Society and has it affixed to appropriate documents.

Respectfully submitted,

Victor J. Tofany, M.D., *Secretary*

SECRETARY (SUPPLEMENTARY)

To the House of Delegates, Ladies and Gentlemen:

Membership. At the September and October, 1982, Council meetings, remission of dues was granted to 27 active members because of illness, financial hardship, and military service.

The Council also approved CME exemptions for 2 physicians because of illness and retirement, after receiving notices from county medical societies recommending that these physicians be excused from fulfilling CME requirements.

The following 34 persons were elected by the Council as life members in action taken at the Council meetings in September and October, 1982:

Vincent J. Barone, Fishkill
Lester Besen, Pt. St. Lucie, Fla.

Kennard T. Chandler, Rochester
Anni G. Cohn, Poughkeepsie

L. Eugene Daily, Norwich
Bernard Drexler, Rochester

Milton E. Eisen, New York

Richard B. Foster, Norwich

Louis Goldstein, Teaneck, N.J.

Frank A. Hale, New York
Edward F. Higgins, Cortland
Thomas F. Houston, Buffalo

Charles H. Immordino, New York

Joseph D. Kepes, Cumberland, Me.
Lloyd Kest, Poughkeepsie
Clifford A. Kingsbury, Ballston Spa
Joseph Klements, Bayside
Herbert Koteen, New York

Lewis L. Li, Flushing
Daniel M. Lipshutz, New York
Horace E. LoGrasso, Silver Creek
Joachim Luwisch, New York

Peter A. Perillo, Jackson Heights

Aaron D. Ruchocki, New York
Henry Rubanek, Forest Hills
Vincent J. Russo, Ft. Lauderdale, Fla.

Oscar Samuely, Bellrose
Albert A. Scafuri, Wappingers Falls
L. Gordon Shepler, Bay Shore

Harvey J. Tompkins, New York
Louis Tremante, Gloversville

George C. Whitney, Geneva
Victor Wolkin, Rochester

Leonard L. Zinker, Rochester

Our Physicians Records Department has supplied the following year-end figures:

1980 Membership (12/31/80)	25,779	
1981 New Members	782	
1981 Reinstated & Reelected Members	134	
		26,695
1981 Deaths	555	
1981 Resignations	294	−849
		25,846
1981 Delinquent Members (Dues)	400	−400
1981 Total Membership (12/31/81)		25,446

Remission of dues was voted for 176 members due to illness, financial hardship or temporary military service.

Membership totals for the years since 1971 have been as follows:

	Active Members	Life Members*	Total	Net Gain or (Loss)
1971	23,961	3,071	27,032	(20)
1972	23,988	3,257	27,245	213
1973	23,752	3,469	27,221	(24)
1974	24,057	3,581	27,638	417
1975	23,543	3,743	27,286	(352)
1976	22,752	3,903	26,655	(631)
1977	22,649	4,035	26,684	29
1978	22,071	4,279	26,350	(334)
1979	21,678	4,420	26,098	(252)
1980	21,431	4,348	25,779	(319)
1981	21,103	4,343	25,446	(333)

* Life members are not subject to Medical Society of the State of New York dues and assessments, but are accorded all the rights and privileges of active membership.

Respectfully submitted,

Victor J. Tofany, M.D., *Secretary*

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

Your reference committee reviewed the annual and supplementary reports of the Secretary and notes that the total membership at the end of 1981 was 25,446, of which 4,343 or 20.5% were life members. Ten years ago the proportion was about 13%.

Your reference committee commends the Secretary for carrying out his responsibilities so diligently.

⟹ Your reference committee recommends that the annual and supplementary reports of the Secretary be filed for information.

⟹ . . . *The annual and supplementary reports of the Secretary were* **FILED FOR INFORMATION . . .**

TREASURER (ANNUAL)

To the House of Delegates, Ladies and Gentlemen:

As Treasurer, I would like to report on the financial outcome of the State Medical Society, for the year ended 1981, as reported by our certified public accountants, Fox and Company.

On April 19, 1982 the Treasurer's report to the Council showed our net profit in the General Operating Fund for 1981 at $595,452, which increases our surplus to $2,793,846.

Regarding the other funds, the Legal Fund had a net loss of $36,684, however, this fund balance is still in excess of $1,000,000, the actual figure being $1,093,491. The Special (Malpractice) Fund had a net loss of $59,195, leaving a fund balance of $794,386.

A more detailed explanation of the operations for 1981 will be included in the Annual Report of the Budget and Finance Committee.

Concerning 1982, my supplementary report will show how we are progressing financially as of September 30, at which time, we should have a fairly accurate projection on our outlook for the year.

In conclusion, your Treasurer wishes to commend the conscientious and dedicated work of Edward Siegel, M.D., Executive Vice-President and Philip G. Keating, Director, Division of Finance. Their tireless efforts contributed immensely in achieving the favorable fiscal condition of the State Society today, and have aided me greatly in carrying out my duties.

Respectfully submitted,

John A. Finkbeiner, M.D., *Treasurer*

TREASURER (SUPPLEMENTARY)

To the House of Delegates, Ladies and Gentlemen:

In my annual report I reported on our financial outcome for 1981. I would now like to give some projections for 1982.

Our revised budget at June 30, 1982, shows a small profit of approximately $20,000. At this time I am confident that we will surpass this figure; however, I must caution this House once again that we had a net decrease in dues income of approximately $50,000 due mainly to the loss of full dues-paying members.

Due to the drastic decrease in interest to be earned on our investments, the normal inflationary factors concerning our expenses, and that the Medical Society has now embarked on filling certain key positions which were vacant for all or part of 1982, our projection for 1983 is a complete turnaround from 1982.

I, therefore, concur with both the Committee on Budget and Finance and the Annual Report of our Executive Vice-President that a dues increase is imminent for 1984.

Respectfully submitted,

John A. Finkbeiner, M.D., *Treasurer*

⇒ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

Your reference committee commends the Treasurer for his work on our behalf. The committee took note of the Treasurer's cautioning that there was a net decrease in dues income and that future investment income can be expected to decrease while expenditures increase. The Treasurer concurs with the Committee on Budget and Finance and our Executive Vice-President that a recommendation to increase dues is almost certain for fiscal year 1984.

⇒ Your reference committee recommends that the annual and supplementary reports of the Treasurer be filed for information.

⇒ . . . *The annual and supplementary reports of the Treasurer were* **FILED FOR INFORMATION** . . .

BOARD OF TRUSTEES

To the House of Delegates, Ladies and Gentlemen:

The Board of Trustees consists of the following members:

Arthur H. Diedrick, M.D., *Chairman*	Westchester
George L. Collins, Jr., M.D.	Erie
G. Rehmi Denton, M.D.	Albany
Paul M. DeLuca, M.D.	Broome
Ralph S. Emerson, M.D.	Nassau
Carl Goldmark, Jr., M.D.	New York
Joseph F. Shanaphy, M.D.	Richmond

The estimated budget for 1982, as submitted by the Budget and Finance Committee, was reviewed and approved on December 16, 1981. Revisions at June 30, 1982 were also approved.

The annual report of the certified public accountants, Fox and Company, for the calendar year 1981, was presented to the Board in April, 1982. This report follows further on and forms an integral part of the Board of Trustees' report to the House of Delegates, as prescribed by our Bylaws. A summary of this report is included in the Treasurers report. A more detailed explanation of 1981 operations is included in the annual report of the Budget and Finance Committee.

Some significant activities since the annual meeting in October, 1981, are as follows:

Investment Committee. Dr. George Collins was appointed chairman of this committee, on November 11, 1981. This committee along with our investment advisors and staff once again did an excellent job. For your information our interest earnings for the general and several other funds are listed below for the year ended 1981:

General Operating	$508,584
Special	$ 99,054
Legal	$115,688

Employee Benefit Plan Committee. Dr. Carl Goldmark Jr., was re-appointed chairman of this committee on November 11, 1981. This committee met on December 1981, and upon their recommendations the Board approved the following:

1. A cost of living increase of 5% for all pensioners, effective January 1, 1982.

2. Upgraded the Thrift Savings Plan, whereby employees can now contribute up to 12.5% of their salary.

Actions of Various Fiscal Matters During the Course of the Year.

A. At the meeting of November 11, 1981, approval was given to the following:

1. The fiscal expenditure of $21,000 to implement Resolution 80-14, revising the distribution of expense money to each District Branch.
2. The expenditure of $3,000 from our Special (Malpractice) Fund to Warren County for their campaign expenses in the malpractice crisis.
3. Payment of Legal Services in the amount of $6,814, rendered in the matter of Medical/Dental Staff, St. Johns Hospital vs. Church Charity Foundation.

B. At the meeting of December 16, 1981, approval was given to the following:

1. The revised Budget for 1981 and the Estimated Budget for 1982.
2. The transfer of $100,000 from the General Fund to the Repair and Replacement Fund.
3. The reimbursement of $265 to Nassau County for their campaign work in the malpractice crisis.

C. At the meeting of January 13, 1982, approval was given that all ten alternate delegates be given an opportunity to attend the American Medical Association Annual Meeting on June 13–17, 1982. Fiscal note $1,000 per person.

D. At the meeting of February 11, 1982, approval was given to the following:

1. The expenditure of approximately $10,000 to have the American Society of Association Executives conduct a management survey of the Medical Society of the State of New York.
2. Payment of $9,500 to the law firm of Dewey, Ballantine, Bushby, Palmer and Wood for their work concerning the viability of a constitutional challenge to the No-Fault Law.
3. The reimbursement of the following counties for their campaign work in the malpractice crisis.

a. Dutchess County	$3,000
b. Suffolk County	$ 200
c. Kings County	$ 184

4. The extension of the contract of Edward Siegel, M.D., as Executive Vice-President, from January 1, 1983, through December 31, 1983.
5. Any county medical society which wishes to be reimbursed from the Special Fund (Malpractice) or the Litigation Fund, must write the Medical Society of the State of New York for prior approval and include a fiscal note with the request.

E. At the meeting of March 24, 1982, approval was given to the following:

1. Auto mileage allowance increase from 22¢ to 26¢ per mile while traveling on Medical Society business.

2. Contribution of $1,000 to the James T. Burns Memorial Fund at Colgate University in memory of J. Richard Burns, J.D.

3. The reimbursement of the following counties for their campaign work in the malpractice crisis.

a. Rockland County	$800.00
b. Onondaga County	$268.00

F. At the meeting of April 21, 1982, approval was given to the following:

1. To continue providing health insurance coverage to the Medical Society of the State of New York's pensioners at an approximate cost of $20,000.
2. A fiscal note of up to $5,000 for a meeting of Directors of Medical Education to discuss the problem of offshore medical schools.
3. Reimbursement of $411.00 to Richmond County for their campaign work in the malpractice crisis, and the tentative approval of Nasau County of $350.00 and Erie County of $500.00, pending receipt of actual expenditures.

G. At the meeting of May 26, 1982, approval was given to the following:

1. Norman Moore, M.D., as the recipient of the annual Henry I. Fineberg, M.D., Award.
2. The tentative approval to Suffolk County of $350.00 for their campaign work in the malpractice crisis.
3. Retainer agreement with the law firm of LeBoeuf, Lamb, Leiby and MacRae at a cost of $50,000 per year.

H. At the meeting of June 22, 1982, approval was given to the following:

1. The appointment of Long Island Trust Company as trustee for the Medical Society of the State of New York Pension Plan as a replacement for Chemical Bank.
2. Reimbursement of $595.00 to Kings County and $400.00 to Onondaga County for their campaign work in the malpractice crisis.

My reign as Chairman was saddened by the untimely deaths of a former Trustee, David Kershner, M.D., and J. Richard Burns, J.D., who, as General Counsel, was a member of this Board.

I would like to extend my appreciation to all who assisted me in my year as Chairman. Each individual Trustee should be thanked for his valuable time and assistance during the past year.

My sincere gratitude to Edward Siegel, M.D., Executive Vice-President, for his knowledgeable advice.

I would, also, like to express my gratitude to Philip G. Keating, Director of the Division of Finance, Donald R. Moy, J.D., General Counsel, and Mrs. Irma Erickson, Executive Associate, for all their help in preparing information and reports crucial to the Board of Trustees in arriving at decisions regarding fiscal matters.

Respectfully submitted,

Arthur H. Diedrick, M.D., *Chairman*

REPORT OF CERTIFIED PUBLIC ACCOUNTANTS

To the Board of Trustees
Medical Society of the
State of New York
Lake Success, New York

We have examined the balance sheet of the Medical Society of the State of New York as of December 31, 1981, and the related statements of revenue, expenses and changes in fund balances, and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements designated above present fairly the financial position of the Medical Society of the State of New York at December 31, 1981, and the results of its operations and changes in its fund balances, and changes in its financial position for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Our examination was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The additional information is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the examination of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Fox & Company

Hempstead, New York
March 12, 1982

MEDICAL SOCIETY OF THE STATE OF NEW YORK
BALANCE SHEET
December 31, 1981

		Restricted Funds				
ASSETS	General Fund	Special Fund	Bernstein Memorial Fund	Bernstein Award Fund	Plant Fund	Endowment Fund
Cash (includes time deposits of $820,822)	$ 712,612	$ 7,019	$ —	$74,754	$ --	$49,725
Investments, at cost (approximates market)	3,312,131	785,234	138,956	—	—	—
Accounts receivable, net of allowance for doubtful accounts of $2,999	28,299	—	—	—	—	—
Accrued interest receivable	109,625	21,014	1,346	4,474	—	1,573
Due from other funds	23,162	—	—	—	—	—
Inventories	26,556	—	—	—	—	—
Prepaid expenses	47,946	—	—	—	—	—
Deposits	10,971	—	—	—	—	—
Employee advances	4,650	—	—	—	—	—
Other assets	1,199	—	—	—	—	—
Property and equipment, at cost, net of accumulated depreciation of $1,047,717 (Note 2)	—	—	—	—	4,025,684	—
Total assets	$4,277,151	$813,267	$140,302	$79,228	$4,025,684	$51,298
LIABILITIES AND FUND BALANCES						
Accounts payable and accrued expenses	$102,850	$ 7,000	$ —	$—	$ —	
Deferred membership dues	132,192	—	—	—	—	—
Due to other funds	—	11,881	1,102	8,479	—	1,700
Other liabilities	52,344	—	—	—	—	—
Total liabilities	287,386	18,881	1,102	8,479	—	1,700
Fund balances:						
Unrestricted:						
Designated by board for:						
Repair and replacement	102,428	—	—	—	—	—
Legal assistance (Note 8)	1,093,491	—	—	—	—	—
Undesignated	2,793,846	—	—	—	—	—
Restricted	—	794,386	139,200	70,749	—	—
Net investment in plant	—	—	—	—	4,025,684	—
Endowment	—	—	—	—	—	49,598
Total fund balances	3,989,765	794,386	139,200	70,749	4,025,684	49,598
Total liabilities and fund balances	$4,277,151	$813,267	$140,302	$79,228	$4,025,684	$51,298

The accompanying notes are an integral part of the financial statements

MEDICAL SOCIETY OF THE STATE OF NEW YORK
STATEMENT OF REVENUE, EXPENSES AND CHANGES IN FUND BALANCES
Year ended December 31, 1981

		Restricted Funds				
	General Fund	Special Fund	Bernstein Memorial Fund	Bernstein Award Fund	Plant Fund	Endowment Fund
Revenue:						
Dues	$4,092,206	$ —	$ —	$ —	$ —	$ —
Advertising income	145,937	—	—	—	—	—
Interest	635,735	99,054	20,410	10,416	—	5,687
Directory circulation	61,436	—	—	—	—	—
Journal circulation and reprints	18,753	—	—	—	—	—
Booth rentals—annual convention	18,350	—	—	—	—	—
Dues collection fee—AMA	18,991	—	—	—	—	—
Other	26,228	2,070	—	—	—	—
Total revenue	5,017,636	101,124	20,410	10,416	—	5,687
Expenses:						
Program services:						
Membership services	1,460,016	156,889	5,696	1,206	28,568	500
Scientific and educational activities	218,033	—	—	—	1,163	—
Conventions and meetings	304,991	—	—	—	5,970	—
Scientific publications	757,426	—	—	—	3,682	—
Communications	515,816	—	—	—	5,428	—
Total program services	3,256,282	156,889	5,696	1,206	44,811	500
Supporting services:						
General administration	1,195,945	3,430	544	—	82,388	—
Total expenses	4,452,227	160,319	6,240	1,206	127,199	500
Excess (deficiency) of revenue over expenses	565,409	(59,195)	14,170	9,210	(127,199)	5,187
Fund balances at beginning of year	3,521,797	853,581	125,030	61,539	4.055,442	44,411
	4,087,206	794,386	139,200	70,749	3,928,243	49,598
Transfers:						
Equipment acquisitions	(97,441)	—	—	—	97,441	—
Fund balances at end of year	$3,989,765	$794,386	$139,200	$70,749	$4,025,684	$49,598

The accompanying notes are an integral part of the financial statements

MEDICAL SOCIETY OF THE STATE OF NEW YORK
STATEMENT OF CHANGES IN FINANCIAL POSITION
Year ended December 31, 1981

		Restricted Funds				
	General Fund	Special Fund	Bernstein Memorial Fund	Bernstein Award Fund	Plant Fund	Endowment Fund
Resources provided:						
Excess of revenue over expenses	$565,409	$ —	$14,170	$9,210	$ —	$5,187
Item that does not use resources:						
Depreciation	—	—	—	—	127,199	—
Decrease in investments	104,972	25,914	—	—	—	—
Decrease in accrued interest receivable	—	5,403	143	—	—	—
Decrease in inventories	62,892	—	—	—	—	—
Decrease in deposits	6,249	—	—	—	—	—
Decrease in employee advances	1,800	—	—	—	—	—
Increase in amount due to other funds	—	5,452	711	—	—	500
Decrease in other assets	11,248	—	—	—	—	—
Increase in deferred membership dues	47,758	—	—	—	—	—
Increase in accounts payable and accrued expenses	—	7,000	—	—	—	—
Increased in other liabilities	26,701	—	—	—	—	—
Total resources provided	827,029	43,769	15,024	9,210	127,199	5,687
Resources used:						
Excess of expenses over revenue	—	59,195	—	—	127,199	—
Increase in investments	—	—	15,956	—	—	—
Increase in accrued interest receivable	22,624	—	—	2,176	—	496
Increase/decrease in amount due to/from other funds	6,579	—	—	83	—	—
Increase in accounts receivable	7,744	—	—	—	—	—
Increase in prepaid expenses	26,946	—	—	—	—	—
Decrease in accounts payable and accrued expenses	107,528	—	—	—	—	—
Total resources used	171,421	59,195	15,956	2,259	127,199	496
Transfers:						
Equipment acquisitions	(97,441)	—	—	—	—	—
Increase (decrease) in cash	$558,167	$(15,426)	$ (932)	$6,951	$ —	$5,191

The accompanying notes are an integral part of the financial statements

MEDICAL SOCIETY OF THE STATE OF NEW YORK

NOTES TO FINANCIAL STATEMENTS

December 31, 1981

1. SUMMARY OF ACCOUNTING POLICIES

This summary of accounting policies of the Medical Society of the State of New York (Society) is presented to assist in understanding the Society's financial statements. These accounting policies conform to generally accepted accounting principles which have been consistently applied in the preparation of the financial statements.

Federal Income Taxes

The Society is a nonprofit organization as defined in Section 501(c)(6) of the Internal Revenue Code and is exempt from Federal income taxes except on unrelated business income.

Investments

Investments are valued at cost. Gains or losses are recognized when the investment is sold. Income from investments is recorded on the accrual basis.

Inventories

Inventories, which consist of paper for printing of publications and supplies are valued at the lower of average cost or market.

Property and Equipment

Property and equipment are recorded in the Plant Fund at cost. Major additions and improvements are purchased by the General Fund and transferred to the Plant Fund. Maintenance and repairs that do not improve or extend the life of the assets are charged to expense. Depreciation of building and equipment is provided over the estimated useful lives of the respective assets on a straight-line basis.

Employee Retirement Plan

The Society has a noncontributory employee retirement plan which covers substantially all employees. Pension costs charged to operations represent actuarially estimated amounts necessary to fund the current service costs of pensions and prior service obligations over approximately 30 years.

Membership Dues

Membership dues are recognized as revenue in the applicable membership period. Dues in arrears are recognized when received.

2. PROPERTY AND EQUIPMENT

A summary of property and equipment as of December 31, 1981, and the estimated lives used in the computation of depreciation is as follows:

	Estimated life (years)	Cost	
Land	—		$ 762,197
Building	50	$3,556,216	
Building improvement	10–41	14,241	
Equipment	5–20	740,747	
		4,311,204	
Less accumulated depreciation		(1,047,717)	3,263,487
			$4,025,684

3. EMPLOYEE RETIREMENT PLAN

The Society maintains a noncontributory retirement plan for the benefit of its employees. To be eligible to participate, employees must be 25 years of age but less than 65 and have had completed 12 months of continuous employment with the Society. The annual charge to operations includes the normal cost of the plan (the amount to be contributed during a year to fund the estimated cost of the plan attributable to operations of that year) plus an annual installment payment required to amortize prior service costs over the remaining 16 years of an original 30-year period. In 1982, $156,605 was charged to operations with respect to the plan.

A summary of plan benefits and plan net assets for the Society's defined benefit plan as of January 1, 1981, follows:

Actuarial present value of accumulated plan benefits:	
Vested	$2,129,100
Non-vested	18,000
	$2,147,100
Net assets available for benefits	$2,124,800
Assumed rate of return	6–1/2%

4. EMPLOYEE THRIFT SAVINGS PLAN

The Society maintains a voluntary employee thrift savings plan for the benefit of its employees. All employees having at least one year of service with the Society are eligible to participate. Participants may elect to contribute up to 10% of their salary and the Society will match the contribution to the extent of the first 2–1/2% of salary. In 1981, $36,240 was contributed to the plan by the Society.

5. FEDERAL AND STATE INCOME TAXES

The Society has charged against current operations New York State taxes of $250 on its unrelated business income for the year ended December 31, 1981. The Internal Revenue Service has examined Federal income tax returns through 1975.

6. SPECIAL FUND

The Special Fund was created in 1975 to pursue an equitable malpractice program and was financed by assessment of $100 to each active member of the Society.

7. REAL ESTATE TAXES

The Society has been assessed annually by the Village of Lake Success, New York, for real estate taxes since June 1, 1972. The amount of $42,424 was paid in 1981. The County of Nassau and the Town of North Hempstead have not assessed the Society for real estate taxes.

8. UNRESTRICTED FUND BALANCE DESIGNATED FOR LEGAL ASSISTANCE

The Fund, which was created by the House of Delegates at the 1977 annual meeting, is to be used for activities which necessitate the use of legal assistance for the members of the Medical Society. The fund was financed by allocating a portion of the dues income for legal assistance.

SUMMARY OF INVESTMENTS HELD AT DECEMBER 31, 1981

	Interest rate (percentage)	Maturity date	Par value	Cost	Market value
GENERAL FUND:					
U.S. Government obligations:					
U.S. Treasury notes	13.875%	2/28/82	$100,000	$ 98,531	$ 100,219
U.S. Treasury notes	9.25	5/15/82	200,000	200,266	197,126
U.S. Treasury notes	14.25	3/31/84	275,000	274,672	277,580
Federal agencies:					
Federal Home Loan Banks	11.25	8/25/82	410,000	403,581	403,725
Federal Home Loan Banks	9.35	8/26/85	125,000	106,406	106,250
Twelve Federal Land Banks	8.00	10/20/82	100,000	99,922	95,875
Twelve Federal Land Banks	8.10	7/22/85	100,000	80,719	83,000
Federal Farm Credit Banks	8.05	3/1/83	100,000	99,891	93,938
Federal Farm Credit Banks	10.90	4/20/83	100,000	100,719	96,625
Federal Farm Credit Banks	9.50	1/23/84	100,000	100,344	91,813
Federal National Mortgage Association	9.25	10/10/83	100,000	100,000	91,938
Federal National Mortgage Association	13.00	11/12/85	200,000	194,125	189,250
Commercial paper:					
General Motors Acceptance Corporation	12.00	1/5/82	100,000	100,000	100,000
General Motors Acceptance Corporation	12.375	1/15/82	116,000	116,000	116,000
General Motors Acceptance Corporation	12.00	1/15/82	14,635	14,635	14,635
General Motors Acceptance Corporation	12.625	1/22/82	50,000	50,000	50,000
General Motors Acceptance Corporation	11.375	1/27/82	100,000	100,000	100,000
General Motors Acceptance Corporation	12.375	2/10/82	105,981	105,981	105,981
General Motors Acceptance Corporation	11.25	2/18/82	105,500	105,500	105,500
General Motors Acceptance Corporation	12.375	2/19/82	100,000	100,000	100,000
General Motors Acceptance Corporation	12.25	3/22/82	50,263	50,263	50,263
CIT	11.05	1/28/82	110,198	110,198	110,198
Barclays America	12.00	2/10/82	112,813	112,813	112,813
Barclays America	12.00	3/10/82	101,565	101,565	101,565
Barclays Bank of New York Repurchase Agreement	10.00	1/11/82	85,000	85,000	85,000
Westinghouse	10.875	2/24/82	101,000	101,000	101,000
Westinghouse	11.00	3/23/82	100,000	100,000	100,000
U.S. Steel	11.50	1/13/82	100,000	100,000	100,000
				$3,312,131	$3,280,294
SPECIAL FUND:					
U.S. Government obligations:					
U.S. Treasury notes	13.875	2/28/82	$100,000	$ 98,469	$ 100,219
Federal agencies:					
Federal Home Loan Banks	11.25	8/25/82	120,000	121,463	118,164
Federal Home Loan Banks	11.60	5/25/83	125,000	117,812	121,406
Federal Farm Credit Banks	10.90	4/20/83	120,000	120,862	115,950
Federal National Mortgage Association	14.05	1/10/84	90,000	90,563	89,663
Commercial paper:					
General Motors Acceptance Corporation	11.25	1/19/82	104,200	104,200	104,200
General Motors Acceptance Corporation	12.25	3/22/82	6,865	6,865	6,865
General Motors Acceptance Corporation	12.25	3/30/82	25,000	25,000	25,000
General Motors Acceptance Corporation	12.25	3/31/82	100,000	100,000	100,000
				$ 785,234	$ 781,467
BERNSTEIN MEMORIAL FUND:					
Commercial paper:					
CIT	11.05	1/28/82	138,956	$ 138,956	$ 138,956

■

⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

Your reference committee appreciates the Board's supervision of the financial affairs of our Society.

We note with satisfaction the efforts of the county medical societies in the medical liability insurance crisis, as reflected in reimbursements totalling $7,323. by the Medical Society of the State of New York.

We compliment the Investment Committee's successful investment policies which resulted in considerable appreciation of funds.

⟹ Your reference committee recommends that the report of the Board of Trustees be filed for information.

⟹ . . . *The report of the Board of Trustees was* **FILLED FOR INFORMATION** . . .

BUDGET AND FINANCE (ANNUAL)

To the House of Delegates, Ladies and Gentleman:

The members of the Committee on Budget and Finance are as follows:

Walter T. Heldmann, M.D., *Chairman*	Richmond
Arthur H. Diedrick, M.D.	Westchester
Richard D. Eberle, M.D.	Onondaga
John A. Finkbeiner, M.D.	New York
Bernard J. Pisani, M.D.	New York
Charles J. Sherman, Jr., M.D.	Monroe

This Committee is responsible for reviewing and revising the estimated budget as prepared and presented to them by the Office of the Executive Vice-President. The Committee then forwards their adjusted report to the Council, which, after approval (with or without further adjustments), sends it to the Board of Trustees, which is responsible for the fiscal affairs of the State Medical Society.

Budgets are prepared on a quarterly basis, and when deemed necessary meetings were held to review these budgets. At these meetings the Committee evaluates the actual income and expenditures for a particular period and makes necessary adjustments, based on experience, economic factors and values.

The Committee would like to inform the House of Delegates as to the status of the General Fund at December 31, 1981. The excess of income over expenditures amounts to $595,452. This sum was made possible because of the following developments which occurred during the course of the year:

1. INCOME SECTION

Once again all our projections in the income section of the budget were basically met as we had anticipated, except in the area of interest on investments. The original projection was $400,000; we actually earned $508,000.

2. EXPENDITURE SECTION

a. *Office of Executive Vice-President.* A total of $105,000 was saved in this office. The main reason for this was unfilled positions such as the Deputy Executive Vice-President and a secretarial position. Smaller savings occurred in the areas of the "Hotline" Bulletin, the Editorial Consultant and annual allowances for the District Branches.

b. *Division of Governmental Affairs.* A saving of approximately $25,000 occurred in the following areas: Legislative Newsletter, postage, telephone and the Albany office which represents the major portion of the saving. We budgeted this for a full year and the office only opened in the fall of 1981.

c. *Division of Scientific Publications.* Printing and paper costs of the *New York State Journal of Medicine* were $50,000 less than budgeted.

It must be pointed out once again that figures projected for such items as printing and paper are difficult to estimate because of the variable sizes of our issues of the *Journal* and other unknown possible increases in cost.

d. *Division of Medical Services.* A total of $35,000 was saved in this division due to a turnover of employees, and once again the budgeted "Economist" was not hired, therefore, it was finally eliminated from this division's budget.

e. *Division of Finance.* There was a saving of approximately $40,000. All of the savings occurred as a result of streamlining and combining several key positions within the Accounting Department among the present staff.

f. *Division of Computer Systems and Services.* A saving of $15,000 occurred. The saving did not occur in any one major budgeted area, but was due to small savings in various budget items.

g. *Division of Advertising Sales and Meetings Services.* A total of $15,000 was saved in this division in the area of commissions. Due to the decrease in our avertising income, the corresponding expense of commissions was lower than projected.

h. *Division of Management Services.* Approximately $10,000 in savings occurred. There was an unfilled position for a good part of the year.

i. *Division of Communications.* A saving of $20,000 occurred as a result of the retirement of the director in this division during the year.

j. *Division of Membership Development.* There was a saving of $25,000 strictly due to the fact that the membership campaign had a budget figure of $50,000 and actual expenses were $25,000.

k. *Annual Meetings—House of Delegates.* A total of $25,000 saving occurred in this area, as a result of ending the annual meeting one day earlier.

l. *Officers, Board of Trustees and AMA Delegation.* A saving of approximately $30,000 occurred. A major part of the saving was in the area of the AMA Delegation, and expenditures for the Las Vegas meeting were substantially lower than we anticipated.

m. *Committees.* Primarily because the budget figures for the committees are only rough estimates a saving of $10,000 occurred.

At the November 19, 1981, meeting of the Budget and Finance Committee, an estimated budget for the year 1982 was prepared. This budget was approved by the Council and the Board of Trustees. This budget was revised at June 30, 1982, and now shows a small profit of $19,662. (see Table I following)

The administration is confident that by the end of the year we will meet this surplus and hopefully surpass it. We concur with that opinion.

In a supplementary report, the Committee will present an estimated budget for the calendar year 1983, with recommendations as to how we should proceed with our financial planning for the coming year.

Your Chairman wishes to thank the members of the Committee for their valuable contributions during the year. On behalf of the Committee he wishes to express his gratitude to Edward Siegel, M.D., Executive Vice-President, and Philip G. Keating, Director, Division of Finance, for their cooperation and diligent efforts throughout the year.

Respectfully submitted,

Walter T. Heldmann, M.D., *Chairman*

TABLE I
MEDICAL SOCIETY OF THE STATE OF NEW YORK
Revised Estimated Budget @ 6/30/82

INCOME	Estimated Budget 1982	Received to 6/30/82	Revised Estimated Budget @ 6/30/82
Dues	4,090,000	2,045,000	4,050,000
Journal Advertising	175,000	125,173	200,000
Journal Circulation	6,000	5,724	11,000
Journal Reprints	18,000	6,040	16,000
Medical Directory—Sales	100,000	37,500	100,000
Scientific Convention—Exhibit Rentals	17,000	25,350	25,350
Interest on Investments—General Fund	300,000	170,016	400,000
What Goes On—Subscriptions	500	141	500
AMA Membership Support	–0–	39,253	39,253
Dues Collection Fee—AMA	19,000	21,660	22,000
Commissions	–0–	1,177	2,000
CME Hospital Survey	2,000	–0–	2,000
Computer Sales	10,000	2,445	10,000
Miscellaneous Income	1,500	749	1,500
Total Income	4,739,000	2,480,228	4,879,603

EXPENDITURES	Schedule No.	Estimated Budget 1982	Expended to 6/30/82	Revised Estimated Budget @ 6/30/82
Office of Executive Vice-President	1–4	726,540	206,804	516,093
General Counsel	5	158,405	66,614	119,561
Governmental Affairs	6	195,756	100,979	173,095
Insurance and Membership Benefits	7	78,622	38,646	79,522
Scientific Activities Division	8	204,400	89,369	201,550
Scientific Publications Division	9	753,629	360,939	761,429
Medical Services Division	10	176,584	86,489	179,584
Finance Division	11–13	204,824	87,861	196,335
Computer Systems & Services Division	14–15	496,997	267,475	501,923
Advertising Sales & Meeting Services	16	141,897	73,013	152,447
Management Services Division	17–19	311,118	141,066	304,152
Communications Division	20–21	160,626	173,527	417,533
Membership	22	154,150	82,381	174,909
Annual Meetings	23–24	161,500	39,963	125,374
Officers, Board, AMA Delegation	25	229,500	121,772	232,500
House of Delegates—Spec. Committees	26	900	31	900
Council Committees	27–28	83,300	34,572	90,160
Legislative Counsel	29	82,500	45,228	90,000
Non-Divisional	30	582,300	285,572	542,874
Total Expenditures		4,903,548	2,302,301	4,859,941
Excess of Income over Expenditures		(164,548)	177,927	19,662

BUDGET AND FINANCE (SUPPLEMENTARY)

To the House of Delegates, Ladies and Gentlemen:

The Board of Trustees and the Administration have followed through on action taken by the 1981 House of Delegates, whereby the $50.00 dues increase, approved in 1977, is now a permanent part of our dues and will no longer be considered for allocations to other areas.

The annual report of this Committee on Budget and Finance contained all of the deliberations since the last annual meeting of the House of Delegates in October, 1981.

The Committee subsequently has formulated a tentative projection of income and expenditures for the calendar year 1983. Table I is an estimate based upon divisional activities. Table II projects expenditures by account classification. These tables were compiled by utilizing present economic trends which, you are all aware, continue in an inflationary pattern.

By examining Table I, you will see that our projection for 1982 shows a small surplus, which we hope to improve on by the end of the year. Our projection for 1983 is not nearly as optimistic, as you will note that we project a loss in excess of $400,000. The Committee feels that this projection is a conservative one and the loss could even be greater.

Our recommendation to the House is that we keep the current dues rate at $200.00 for 1983, since we will show a profit for 1982; however, we must advise this House that we see no way of avoiding a dues increase for 1984 since starting in 1983 we will be operating at a loss.

The Committee will meet on November 18, 1982, when a more definite estimated budget for 1983 will be formulated. This budget will be forwarded to the Council and Board of Trustees for their approval.

Respectfully submitted,
Walter T. Heldmann, M.D., *Chairman*

TABLE I

MEDICAL SOCIETY OF THE STATE OF NEW YORK

Statement of Budgetary & Actual Operating Income & Expenditures

	Revised Estimated Budget 1981	Received to 12/31/81	Revised Estimated Budget @ 6/30/82	Received to 6/30/82	Tentative Estimated Budget 1983
INCOME					
Commissions	–0–	–0–	2,000	1,177	2,000
Dues	4,090,000	4,092,206	4,050,000	2,045,000	4,025,000
Journal Advertising	175,000	145,469	200,000	125,173	200,000
Journal Circulation	3,000	6,146	11,000	5,724	11,000
Journal Reprints	15,000	12,606	16,000	6,040	16,000
Medical Directory—Sales	60,000	61,436	100,000	37,500	50,000
Scientific Convention—Exhibit Rentals	17,325	18,350	25,350	25,350	25,350
Interest on Investments—General Fund	400,000	508,584	400,000	170,016	400,000
What Goes On—Subscriptions	500	468	500	141	500
Dues Collection Fee—AMA	18,811	18,991	22,000	21,660	22,000
CME Hospital Survey	3,000	2,778	2,000	–0–	2,000
Computer Sales	10,000	11,585	10,000	2,445	10,000
Health Care in Correctional Institutes	1,403	1,403	–0–	–0–	–0–
Miscellaneous Income	1,500	10,463	1,500	749	1,500
AMA Membership Support	–0–	–0–	39,253	39,253	30,000
TOTAL INCOME	4,795,539	4,890,485	4,879,603	2,480,228	4,795,350
		Expended to 12/31/81		Expended to 6/30/82	
EXPENDITURES					
Office of Executive Vice-President	486,477	381,037	516,093	206,804	551,045
General Counsel	148,889	147,099	119,561	66,614	133,897
Governmental Affairs	197,043	172,202	173,095	100,979	188,192
Insurance & Membership Benefits	73,864	74,411	79,522	38,646	86,255
Scientific Activities Division	190,777	184,865	201,550	89,369	218,414
Scientific Publications Division	675,678	625,176	761,429	360,939	838,393
Medical Services Division	203,719	166,594	179,584	86,489	194,704
Finance Division	209,692	169,769	196,335	87,861	212,845
Computer Systems & Services	502,436	489,472	501,923	267,475	466,353
Advertising Sales & Meeting Services	136,601	118,689	152,447	73,013	166,199
Management Services Division	288,167	278,461	304,152	141,066	329,833
Communications Division	451,880	432,959	417,533	173,527	477,498
Membership Development	98,600	72,259	174,909	82,381	183,808
Annual Meetings	135,519	109,074	125,374	39,963	137,911
Officers, Board, AMA Delegation	207,900	180,987	232,500	121,772	255,750
House of Delegates—Spec. Committee	900	11	900	31	900
Council Committees	77,800	66,865	90,160	34,572	99,176
Legislative Counsel	67,500	70,253	90,000	45,228	90,000
Non-Divisional	561,824	554,850	542,874	285,572	577,862
TOTAL EXPENDITURES	4,715,266	4,295,033	4,859,941	2,302,301	5,209,035
Excess of Income over Expenditures	80,273	595,452	19,662	177,927	−413,685

TABLE II
MEDICAL SOCIETY OF THE STATE OF NEW YORK
Statement of Expenditures by Account Classification

	Revised Estimated Budget 1981	Expended to 12/31/81	Revised Estimated Budget @ 6/30/82	Expended to 6/30/82	Tentative Estimated Budget 1983
GENERAL DEPARTMENTAL EXPENSES					
Salaries	1,900,030	1,752,017	1,881,069	856,348	2,025,365
Payroll Taxes	134,100	119,205	137,200	72,270	148,180
Health Insurance	89,200	88,821	112,464	51,702	123,700
Other Employee Benefits	262,650	240,701	270,400	128,118	297,400
Travel	89,400	84,172	68,400	33,501	75,300
Telephone & Telegraph	89,150	73,286	99,200	45,664	109,120
Postage	50,950	43,619	44,400	17,941	48,900
Stationery & Supplies	49,850	49,900	47,950	25,597	52,750
Books & Publications	15,850	11,680	15,800	7,930	17,400
Provisions for Doubtful Accounts	1,300	1,300	1,300	-0-	1,300
Miscellaneous	2,650	1,391	1,800	1,310	1,800
GENERAL HEADQUARTERS EXPENSES					
Headquarters Maintenance & Security	121,500	121,500	129,400	64,700	142,340
Equipment Maintenance & Rental	40,000	39,843	40,000	17,697	44,000
Electricity, Heating & Water	71,000	82,314	91,000	42,056	100,100
Village Taxes	42,424	42,424	42,424	42,424	45,000
Maintenance & Repair Company Car	8,000	3,743	6,000	2,642	6,600
GENERAL NON-DIVISIONAL EXPENSES					
Audit	14,000	9,500	10,500	10,500	11,550
Insurance	85,000	80,643	80,000	38,000	88,000
NYS Association of Professions	1,000	1,000	1,000	81	1,000
Auxiliary	3,000	3,105	7,000	2,416	7,000
Dues & Contributions	2,500	540	1,500	1,325	1,650
Cancer Newsletter	1,000	1,000	1,000	-0-	1,000
Pre-Employment Physical Exams	500	365	500	40	500
Payment to County Society-Dues Collect.	53,750	63,002	53,000	29,550	53,000
Unrelated Business Income Tax	15,000	4,985	250	250	5,000
Investment Advisory Fee	10,000	14,264	16,000	7,661	17,600
Employee Benefit Plan-Consultant Fee	12,000	12,298	12,000	4,500	13,200
Staff Training	1,000	484	1,000	-0-	1,000

PUBLICATIONS					
Journal—Printing, Paper & Postage	460,000	413,200	515,000	254,547	566,500
Commissions & Discounts	49,900	35,289	58,900	28,819	64,800
Journal—Other Costs	19,500	16,386	19,000	6,101	20,900
Directory—Printing, Paper & Postage	105,500	97,500	105,500	52,750	116,050
News of NY—Printing & Postage	80,000	80,407	100,000	47,054	110,000
Ad Rem Bulletins	2,500	1,460	2,500	614	2,500
Hot Line—Printing & Postage	13,000	-0-	13,000	-0-	13,000
Printing of Pamphlets	2,000	-0-	-0-	-0-	-0-
Legislative Newsletter	36,000	30,823	36,000	22,866	39,600
OFFICERS, BOARD & AMA DELEGATION	207,900	180,987	232,500	121,772	255,750
EXPENSES COMMON TO SPECIFIC DEPARTMENTS & DIVISIONS					
Consultant—Editorial	7,500	-0-	-0-	-0-	-0-
Consultant Fee's	43,000	43,000	50,500	21,500	43,000
Conferences—Presidents & Area	3,000	1,367	5,000	2,477	5,000
District Branches	10,500	6,488	22,500	2,980	22,500
Albany Legislative Office	15,000	1,768	8,000	3,800	8,800
Health Care in Correctional Inst.	6,793	6,793	-0-	-0-	-0-
CME Council of New York State	3,000	65	3,000	-0-	3,000
Redway Award & Medal	750	575	750	-0-	750
Payroll Service	2,500	2,734	3,000	1,315	3,300
Computer Maintenance & Rental	35,000	32,478	40,000	18,508	40,000
Computer Education	1,500	630	1,500	-0-	1,500
Computer Audit	3,000	-0-	-0-	-0-	-0-
Software Package	52,000	59,010	40,000	36,362	20,000
Data Entry Services	40,000	39,717	3,700	3,638	2,000
Medical Assistants	600	549	1,000	862	1,000
Citations	500	941	500	225	500
Public Relations	1,800	2,287	1,800	562	2,000
Professional Relations	14,000	9,622	7,500	3,420	7,500
Membership Campaign	50,000	25,460	45,000	27,494	45,000
House of Delegates—Special Committee	900	11	900	31	900
Legislative Counsel	67,500	70,253	90,000	45,228	90,000
State Fair	-0-	12,192	12,800	1,391	12,800
Temporary Help	-0-	-0-	10,000	7,037	-0-
Resident Section	-0-	-0-	3,000	-0-	3,000
Student Member Section	-0-	-0-	14,000	2,912	14,000
Management Survey	-0-	-0-	10,000	3,000	-0-
Transportation	-0-	-0-	15,000	6,278	16,500
ANNUAL MEETINGS					
House of Delegates	94,600	68,181	77,600	-0-	85,400
CME Spring Assembly	40,919	40,893	47,774	39,963	52,550
COUNCIL COMMITTEES	77,800	66,865	90,160	34,572	99,180
	4,715,266	4,295,033	4,859,941	2,302,301	5,209,035

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

Your reference committee finds it worthy to note that every division's budget was lower than estimated. Interest on investments exceeded the estimated by $108,000. or 22%. We are glad that a dues increase is not considered for 1983. However, your reference committee notes that, starting in 1983, the Society will be operating at a deficit. Nevertheless, the committee is pleased with the overall soundness of the Society's finances.

⟹ Your reference committee recommends that the annual and supplementary reports of the Committee on Budget and Finance be filed for information.

⟹ . . . *The annual and supplementary reports of the Committee on Budget and Finance were* **FILED FOR INFORMATION** . . .

Edward Siegel, M.D.

EXECUTIVE VICE-PRESIDENT

To the House of Delegates, Ladies and Gentlemen:

It is with great pleasure that I again render my report as Executive Vice-President to the House of Delegates. I changed the format last year, and I intend to follow the same procedure this year. At this time I will present the reports of the Directors of the various Divisions and, at the conclusion of each report, I shall also comment on the activities of that Division and conclude with specific recommendations for the House of Delegates' consideration.

Division of Advertising Sales and Meeting Services

Robert Miller, *Director*

Journal of Advertising. Our advertising representative, United Media Associates, continues to do a commendable job in spite of a large portion of the pharmaceutical advertising dollar being diverted to the specialty journals. Revenue from advertising for the year 1981 was $146,116.15, a decrease of $22,331.60 from 1980. The average number of advertising pages per issue was 18. As a result of an increase in advertising rates, effective January, 1982, the gross income from advertising for the first half of 1982 was $44,104.10 more than the income for the same period in 1981. However, the average number of advertising pages per issue was 29.

This Division handles all phases of advertising production details between the advertising agencies and the printer and works closely with the Managing Editor in planning the layout of editorial and advertising pages in each issue of the *Journal.*

Since the last report, we discontinued buying paper from Saxon Paper Company. After careful consideration of costs, in addition to the basic paper cost per pound, it was decided to ask our printer, Mack Printing Company, to purchase paper directly from the mill. Our printer was able to offer us a comparable price which will ultimately result in savings. Also, we have gradually reduced the number of pages in each issue of the Journal over the past year, which, in turn, has reduced paper, printing and mailing costs. For the period of July 1981 to June 1982, the ratio of editorial/advertising pages was 82 percent editorial and 18 percent advertising.

Journal Subscriptions. Of the 1,285 paid subscriptions, 237 are foreign university and hospital libraries, 45 are Canadian, 412 are from New York State, and 591 are out-of-state subscribers.

Our exchange program comprises 85 foreign publications and 112 domestic publications. It is interesting to note that the *Journal* is read worldwide. Some of the countries who receive our *Journal* are China, Japan, India, Sri Lanka, Australia, Philippines, South Africa, Zimbabwe, Egypt, Brazil, Mexico, Rumania, Bulgaria, Russia, Hungary, Israel and the central European countries.

Technical Exhibit Sales. Income from the rental of 45 technical exhibits at the 1982 Annual CME Assembly, held at the Rye Town Hilton, amounted to $25,100. Again this year, there were five firms on standby for exhibit space in case of cancellation. Now that the coffee break area is located adjacent to the exhibit area, there is an increase in the flow of physicians through the exhibit area. As a result, the exhibitors find it desirable to attend our meeting.

CME Assembly Services. The 1982 Annual CME Assembly, held at the Rye Town Hilton, was well attended by physicians. There were 1,294 preregistrations processed by this Division several months prior to the meeting; a total of 531 physicians did not attend. With the help of the Division of Scientific Activities, this Division prepared the preliminary and final programs for the printer, in addition to providing the hotel with instructions concerning meeting room arrangements for each speaker.

Promotional material for this meeting appeared in the *New York State Journal of Medicine*, the *News of New York* and various county medical society bulletins. The preliminary program was mailed to selected science news editors. Also, the Division of Membership Development included the CME Assembly Preliminary Program in a membership promotional mailing to 17,000 nonmember physicians in downstate New York.

The attendance figures for the 1982 CME Assembly were as follows:

Physicians	1,172
Allied Professions	128
Guests	95
TOTAL	1,395

House of Delegates/Auxiliary Meeting Services. Meeting room arrangements with the Grand Hyatt were conducted by this Division for the 1981 meeting of the House of Delegates and Auxiliary. Because of the spacious ballrooms and the professional staff at this hotel, the meetings ran smoothly, and the MSSNY workrooms operated efficiently.

Future Meeting Dates of the House of Delegates and CME Assembly. In 1984, separate meetings of the House of Delegates and the CME Assembly will be held in New York City. Beginning in 1985, and thereafter, the meetings will be combined and will take place at the New York Hilton.

There are several advantages in holding a combined meeting in New York City during the month of March:

A. When the CME Assembly is held in New York City, the attendance is doubled. As a result of the increased attendance, the number of technical exhibits is doubled, thus increasing revenue to offset expenses of the meeting.

B. When the meetings are combined, the overall expenses are reduced.

C. Because there are fewer tourists and fewer conventions scheduled during the month of March, the Hotel offers lower rates for sleeping rooms and rental of the exhibit hall.

The following is a schedule of future meeting dates:

CONFIRMED DATES

1983 — *CME Assembly* — May 13–15, 1983 (Friday–Sunday)
Rye Town Hilton, Port Chester

House of Delegates – October 30 – November 2, 1983* (Sunday–Wednesday)
Concord Hotel, Kiamesha Lake

1984 — *CME Assembly* — June 29 – July 1, 1984 (Friday–Sunday)
Sheraton Centre, New York City

House of Delegates — October 14–17, 1984 (Sunday–Wednesday)
New York Hilton, New York City

Auxiliary — October 15–16, 1984 (Monday–Tuesday)

1985 — *Annual Convention* (Combined) — June 6–9, 1985
New York Hilton, New York City
a) House of Delegates — (Thursday–Sunday) June 6–9, 1985
b) CME Assembly — (Friday–Sunday, 5pm) June 7–9, 1985
c) Auxiliary — (Saturday–Sunday) June 8–9, 1985

1986 — *Annual Convention* (Combined) — March 6–9, 1986
New York Hilton, New York City
a) House of Delegates — (Thursday–Sunday) March 6–9, 1986
b) CME Assembly — (Friday–Sunday, 5pm) March 7–9, 1986
c) Auxiliary — (Saturday–Sunday) March 8–9, 1986

TENTATIVE DATES

** 1987 — *Annual Convention* (Combined) — March 14–18, 1987
New York Hilton, New York City
a) CME Assembly — (Saturday–Monday, 5pm) March 14–16, 1987
b) House of Delegates — (Sunday–Wednesday) March 15–18, 1987
c) Auxiliary — (Monday–Tuesday) March 16–17, 1987

1988 — *Annual Convention* (Combined) — March 12–16, 1988
New York Hilton, New York City
a) CME Assembly — (Saturday–Monday, 5pm) March 12–14, 1988
b) House of Delegates — (Sunday–Wednesday) March 13–16, 1988
c) Auxiliary — (Monday–Tuesday) March 14–15, 1988

1989 — *Annual Convention* (Combined) — March 11–15, 1989
New York Hilton, New York City
a) CME Assembly — (Saturday–Monday, 5pm) March 11–13, 1989
(b) House of Delegates (Sunday–Wednesday) March 12–15, 1989
c) Auxiliary — (Monday–Tuesday) — March 13–14, 1989

COMMENTS

At the end of Mr. Miller's report you will notice a set of future meeting dates; one is confirmed dates through 1986 and the other is a tentative set of dates through 1989.

For the information of the House, it must be understood that it takes a great deal of time and energy to arrange dates and that we must set dates many years ahead of time to ensure availability of hotel space on appropriate dates. The Council has decided to once again combine the Scientific Assembly with the Annual Meeting of the House of Delegates, and you will note that this does not actually take place until 1985. They will not run at the same time; there will be a slight overlapping as an examination of the dates will reveal. We feel that this will accomplish our purposes and guarantee increased attendance. It will also give the delegates a chance to participate in the CME Assembly without an extra trip. You will note the 1983 House of Delegates meeting will again be held at the Concord. As of this date we do not know what our experience will be with the Concord Hotel, but we trust that it will be satisfactory. At any rate, in 1984, we shall be back in New York City for the Annual Meeting.

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* At its meeting on November 10, 1982, the Council of the Medical Society of the State of New York changed the dates for the meeting of the House of Delegates to October 28–31, 1983.

** This date will be confirmed in June of 1984.

DIVISION OF COMMUNICATIONS

Edward A. Hynes, *Director*

The Communications Division resumed a more normal configuration during the early part of the year, after a hiatus of nearly 11 months. When Guy D. Beaumont retired as Director on August 1, 1981, interim reporting relationships were established to provide for the continuing management of the Division's functions while a search for a new Director went forward.

The staff and functions of the Division were consolidated once again under a new Division Director on June 21, 1982. These functions include news media relations, internal news publications, member and public information requests, and the field service of four regional representatives.

Through most of the year, the regional representatives reported directly to the Executive Vice-President; and the remaining functions came under the temporary supervision of James A. McCloskey. In this arrangement, the work of the Division was carried on effectively. Mr. McCloskey continues as Editor of *News of New York* and *Ad Rem*, and serves as well on a variety of writing assignments, including news releases.

During June, the Division developed two devices which are expected to be used regularly in the future: a brief report of Council meeting highlights sent immediately after the monthly meetings to county medical society presidents and executives; and a news release on selected articles in the current issue of the *New York State Journal of Medicine*.

Other new communications projects, and the resumption of some that have been dormant, are being considered in consultation with staff and officers at the state and county levels. Some of these will become part of the Division's next annual plan.

An underlying concept worth mentioning here is that the Communications Division provides a resource for other divisions and for the county medical societies in the development of communication strategies and materials which they need to be most effective. Thus, the Communications Division seeks to assist in as wide a range of activities as possible, as well as to develop and operate programs which are specifically its own.

In News Media Relations, twenty releases were produced during the year, six of them relating to the medical liability insurance crisis. Two outside consultants, Irving J. Rosenthal and L. Richard Guylay, handled the medical liability releases, produced during the summer of 1981. Mr. Rosenthal remained for a time as consultant, producing releases of general medical interest into the spring of 1982. The Annual CME Assembly has been somewhat more successful than the House of Delegates in attracting media attention.

The Information function is a vital service, not only to members of the Medical Society of the State of New York but to the general public as well. Information requests, both by telephone and letter, amount to more than 200 each month. Besides handling this high volume of inquiries, the Information staff person also provides assistance to the MSSNY Auxiliary and to the American Association of Medical Assistants, New York State Society, Inc. For most of fiscal 1982, these functions were handled by Miss Pamela Maichin. In May of 1982, when Miss Maichin was reassigned to the Office of the Executive Vice-President, Mrs. Kathleen Atchley was hired as manager of the Information Department.

News of New York, produced 24 times annually, is MSSNY's direct communication link to members for such nontechnical information as news of state and federal legislation, Workers' Compensation matters, membership benefits and other socioeconomic matters bearing on the practice of medicine. One issue (October 1, 1981) was devoted entirely to a discussion of the pros and cons of "claims-made" medical liability insurance.

Another issue contained an insert on the Society's membership benefits. An important function of *News of New York* during the year was providing information on how physicians could fulfill the MSSNY CME membership requirement. By the end of the first CME reporting period, only 51 members had failed to meet the requirement.

Ad Rem Bulletins are used to convey breaking news to member and nonmember physicians who belong to hospital staffs. Approximately 370 of the bulletins are sent to hospitals across the state, where they are mounted on strategically located *Ad Rem* bulletin boards. *Ad Rem* is published as needed.

The MSSNY Field Service provides personal communication between MSSNY and its component county medical societies. The four regional representatives, all of whom have public relations and/or association management experience, contact the officers and staff of local societies and District Branches within their regions to exchange the latest information and to assist with both local and State Society programs. The representatives are: Harry Dexter, John Mucci, Frank R. Salant and Gerald Sullivan.

At meetings of county medical societies and District Branches, the field representatives provide information from MSSNY and take part in discussions involving State Society policy. They also present a "new member kit" with comprehensive information on MSSNY and AMA programs and benefits to each new member.

The field representatives assisted in MSSNY's exhibit at the Syracuse State Fair, held in late August and early September. More than 100,000 persons passed through the Society's exhibit at the 1981 fair, which featured a full-sized model of a computed axial tomography (CAT) scanner, a TV presentation and brochures on how the scanner is used. Mr. Sullivan performed Mr. Beaumont's duties as staff for the MSSNY Delegation to the AMA during the 1981 Interim Meeting and 1982 Annual Meeting of the Association.

COMMENTS

We now have a new Director of the Division of Communications, namely, Edward A. Hynes, who comes to us highly recommended with an extensive background not only in communications but also in political action. As you know, Mr. Hynes is replacing Mr. Beaumont who retired on the first of August, 1981.

I look forward to increasing activity in this Division, and will make specific recommendations to the Council for a considerable increase in this Division's budget so that it may properly fulfill its mission. I have also put the field representatives back under the direction of Mr. Hynes because they properly function best by reporting directly to the head of the Division.

The House should also know that we are continuing the Medical Society of the State of New York exhibit at the New York State Fair which is held in Syracuse. The fair exhibition was highly popular and we hope to continue our participation.

Division of Computer Services

Jay S. Garnock, *Director*

The Computer Services Division, as of July, 1982, is right on target with its anticipated enhancements. I must say with great pleasure that July, 1981, to July, 1982, has been by far our most productive year when it comes to efficiency enhancements.

We are getting closer and closer to our primary goal of putting MSSNY completely on-line. The on-line capability allows the updating of all data via the CRT (Cathode Ray Tube). Our biggest enhancement to date allows us to enter our dues via the CRT as opposed to the antiquated method of keypunching first and updating later. This has eliminated a tremendous strain on our Physician Records Department, which happens to be the backbone of this Division when it comes to the recording of data for our physicians.

Some of our other enhancements, which have equal importance, are as follows:

1. The creation of a nonmember Student File used for membership recruiting.
2. The creation of a nonmember Resident File.
3. The creation of the most advanced computer operating system for our System 3.
4. The use of our Word Processing System for membership recruitment correspondence.
5. The development of various specialized reports and statistical analyses to be used by the Department of Research and Development for our long-awaited Demographic Survey.

A few up and coming areas for computerization or enhancements are in the design stage as of right now. They are as follows:

1. Develop Student Member and nonmember on-line updating. (changes, deletions, additions, etc.)
2. Student billing.
3. Student dues paid on-line.
4. Availability to transfer on-line.
    A. Nonmember to Member
    B. Member to Nonmember
5. Communications between System 6, Word Processor, and System 3, Main Frame.
6. Display Medical License number and year issued on directory screen.
7. Continue reporting for Demographic Survey as requested by Research and Development.

COMMENTS

Of major interest is the departure of the Director, Jay S. Garnock, who left our employ on the first of July. Mr. Garnock, however, continues to serve in a consultant capacity for the remainder of the year 1982. I have appointed Ivan Najman as Acting Director of the Computer Services Division.

This Division continues a very essential role. As you know there are constant demands to furnish computer mailing lists to all sorts of organizations. We have adopted a guide which governs the release of all information from our files, and I think that in the best interest of the delegates that this guide be included in my comments.

Guidelines for Release of Mailing Lists

1. Requests from Members

—All requests from members for lists of local county society physicians will generally be referred to the county medical society in question. If the CMS approves the request, the MSSNY will comply.

—Usual acceptable requests:
change of office address
additional colleagues, etc.

2. Requests from Nonmembers

—Requests from nonmembers are usually not accepted, but will be considered on an individual basis. Factors bearing on acceptance involve commercial aspects, CME, etc. Lists are usually available to membership benefit organizations which have been approved by the Council.

3. General Considerations

—MSSNY, on completion of its demographic survey, will have an advanced capability for listing economically profitable information. Our policy will be quite circumspect in making this information available. MSSNY's general policy will be to protect the confidentiality of these lists to avoid needless harassment of our members by commercial ventures.

—The Executive Vice-President shall be empowered to decide each case, subject, of course, to the Council's ultimate authority.

I should again like to assure the House that we scrupulously avoid any breaches of confidentiality which may be created by the improper use of our computer services. We shall continue to monitor all use of our services and promise continuing vigilance so as not to violate confidentiality or abuse our members' rights.

Division of Finance

Philip G. Keating, *Director*

The Division of Finance has the following responsibilities: accounting, budgeting, purchasing and our employees' benefits plans. In addition, the Director assists the Council committee on Budget and Finance, and is a member of the Trustee's committee on Investments and Employee Benefits Plans.

The following is a report on the various activities of the Finance Division:

1. Accounting Department and Budgeting. The Division Director works closely with his staff in the Accounting Department, the latter being responsible for receipts of all the State Society's income, payments of the Society's bills, employees' payroll and related benefits, and the recording of these transactions in appropriate accounting books and ledgers.

Additionally, this Department is responsible for compiling the initial financial data used in preparing budgets which, before submission to the Committee on Budget and Finance, are reviewed by the Director of Finance and the Executive Vice-President.

The Accounting Department has been streamlined by combining several jobs among key personnel, one being Rosandra Slefko, a member of my staff, promoted to Accounting Supervisor, in addition to doing her normal duties of payroll and employees' benefits.

2. Purchasing and Travel. Mrs. Florence Bambek still continues to do a fine job in the areas of travel arrangements for Society business, competitive bidding for supplies and equipment, and quantity purchasing, when practical.

3. Committee on Budget and Finance. This Committee meets quarterly to review the budget and make revisions, when necessary. However, due to our on-line estimations no changes were needed; therefore, this Committee only met on June 30, 1981, and September 30, 1981.

4. Investment Committee. This Committee, the Director of Finance and our investment advisors were exceptionally active this year, and, as a result of their action and high interest rates, combined interest on all the State Society's investments was in excess of $^3/_4$ of a million dollars. This allowed the Society to show a significant surplus for 1981.

5. Employees' Benefits Plan Committee. This committee met and made a few revisions in the contracts of our Pension and Thrift Savings Plans. These changes were advantageous to both current and past employees of this Society.

COMMENTS

This Division has worked extremely well under Mr. Keating. As you know, Mr. Keating was a replacement and has performed well up to expectations. He has instituted certain fiscal policies such as competitive bidding on our insurance policies. This has resulted in considerable savings for the State Society.

GENERAL COUNSEL

Donald R. Moy, J.D.

The Office of General Counsel was deeply saddened by the untimely passing of its General Counsel, J. Richard Burns, J.D., on March 12, 1982. Mr. Burns served as General Counsel to the Medical Society from April, 1973, when the Office of General Counsel was created, until the date of his death. He first came to the Medical Society in September, 1963, when he was appointed as the Director of the Medical Society's Business Division.

Mr. Burns will be sorely missed by his friends and colleagues at the Medical Society.

The activities of the Office of General Counsel fall into five categories:

I. Written Memoranda and Letters Which Have Involved Legal Research
II. Legal Matters
III. Committees
IV. Meetings
V. Miscellaneous

I. Written Memoranda and Letters: Since the last annual meeting of the Society, the General Counsel has prepared numerous memoranda on behalf of administration and various divisions and committees, county medical societies and individual members throughout the state. The topics varied greatly, such as: anatomical gifts; abortion; the legal implications of terminating life support systems for comatose patients, and "do not resuscitate" orders; informed consent; medical treatment of minors; professional medical conduct; impaired physicians; various mandatory reporting laws; definition of the various health professions; etc., etc.

II. Legal Matters

(a) *State of New York v. American Medical Association, et al.* The General Counsel is pleased to announce the successful conclusion of this action. On July 23, 1981, a Stipulation of Dismissal was entered, with prejudice, as against the Medical Society of the State of New York and the other remaining defendants. The phrase, "with prejudice" means that the State of New York cannot reinstitute the same action based upon the same facts.

The Stipulation of Dismissal followed a Stipulation of Settlement between the State of New York and the American Medical Association, which was entered on July 14, 1981. Previously, the action against the one individual defendant, Henry I. Fineberg, M.D., was dismissed on June 23, 1981 by the United States District Court for the Eastern District of New York.

It should be recalled that the lawsuit began on July 5, 1979, when the State Attorney General filed an antitrust suit against the Medical Society of the State of New York, 11 other corporate defendants, and Doctor Fineberg, who was the Executive Vice-President of the Medical Society at the time. The suit alleged that the defendants engaged in a conspiracy to "isolate" and "eliminate" chiropractic.

In resisting the action of the State Attorney General, the Medical Society of the State of New York made no concessions or compromises regarding its right to speak out concerning chiropractic.

(b) *Medical Society v. Board of Regents.* This action involves the challenge of Section 29.2(a)(6) of the Rules of the New York State Board of Regents relating to the access of medical records by patients and succeeding practitioners. Section 29.2(a)(6) provides that professional misconduct includes:

> "upon a patient's written request, failing to make available to a patient, or, to another licensed health practitioner consistent with that practitioner's authorized scope of practice, copies of the record required by paragraph (3) (medical records) . . ."

The Medical Society contended that, in requiring the physician to provide copies of the medical records directly to the patient, the regulation is inconsistent with accepted medical procedures, and is in conflict with statutory provisions which only require the physician to send copies of the medical record to succeeding physicians or hospitals designated by the patient.*

(c) *Medical Society of the State of New York, et al. v. Carey, et al.* ("No-Fault Lawsuit") This lawsuit involves the challenge of Section 678 of the Insurance Law which limits physicians' fees for services rendered to victims of automobile accidents to the fees established by the Chairman of the Workers' Compensation Board. In addition to the fundamental constitutional issues raised concerning the imposition of the fee schedule, the Medical Society has claimed that the fee schedule is irrational, unreasonable, arbitrary and without any basis in fact. A statistical report from the actuarial firm Market Opinion Research has been received, and on the basis of the report, negotiations are being pursued.

(d) *Seinfeld v. Denton.* The Supreme Court, Suffolk County, granted the Medical Society's motion to dismiss on June 29, 1981. On June 26, 1982, the Supreme court for the Second Judicial Department unanimously affirmed the judgment of the lower court.

This action was commenced in June, 1980, by a member of the Medical Society, who at the time of his lawsuit against the Medical Society, was a defendant in a medical malpractice suit. The plaintiff sought to compel the Medical Society to pay all sums expended by him to defend the medical malpractice action, plus any and all additional sums which plaintiff could be obligated to pay on account of the malpractice action.

The plaintiff based his claim against the Medical Society on a provision of the Bylaws of the Medical Society in 1962 whereby the Medical Society would offer legal defense by Counsel to the Medical Society to its uninsured members if they were sued for malpractice. In 1973, the Medical Society amended its Bylaws to terminate the policy of offering this benefit. The plantiff was insured in 1962. In 1977, the plaintiff was sued for malpractice which allegedly occurred in 1962.

The decision of the Supreme Court, Suffolk County, as affirmed by the Appellate Division, Second Judicial Department, agreed with the contention of the Medical Society that the plaintiff failed to state a valid cause of action.

(e) *St. John's Episcopal Hospital Smithtown Medical Staff v. St. John's Smithtown Hospital.* This controversy arose when the Church Charity Foundation, which owns three hospitals — St. John's Episcopal Hospital, Brooklyn; St. John's Episcopal Hospital, South Shore Division; and St. John's Episcopal Hospital, Smithtown; found itself in financial straits. Upon a request for an increase in their reimbursement rate for the three hospitals, the Office of Health Systems Management informed the Foundation that a combined rate could be given if the three hospitals were amalgamated into one. The amalgamation required a unified set of bylaws for the three separate medical staffs. The medical staff of St. John's Episcopal Hospital, Smithtown, voted against abrogating its current bylaws. An action for declaratory relief was instituted on March 24, 1981. The Medical Society was granted permission to appear as amicus curiae to argue that the bylaws of the medical staff represent a contract between the medical staff and the governing authority of the hospital, and as a contract, the bylaws may not be unilaterally abrogated by the hospital governing body.

In July, 1981, the Supreme Court, Suffolk County, denied the motion of the medical staff and the cross motion of the hospital for summary judgment. It was ruled that triable issues of fact were present that could only be resolved at trial. We do not have any information to indicate whether the parties intend to proceed to trial.

(f) *Taub v. Medical Society of the State of New York, et al.* This is an action for an alleged accident that occurred in the parking lot adjacent to 410 Lakeville Road. Plaintiff has named as defendants all parties that she believes to have ownership or control of the lot. The Medical Society has furnished its insurance carrier with copies of deeds showing that the Medical Society does not own the premises listed in plaintiff's complaint.

Numerous examinations before trial (EBTs) have been adjourned for a multiplicity of reasons. The General Counsel has worked closely with the Medical Society's insurance carrier in this matter.

(g) *Furlong, M.D., v. Chairman of the Workers' Compensation Board.* This case arose with regard to petitioner's fees for medical services rendered in Workers' Compensation cases, which were excessive in the opinion of the late Arthur Cooperman, Chairman of the Workers' Compensation Board at that time. The petitioner alleged that Mr. Cooperman made threats to revoke her authorization to treat Workers' Compensation cases if she continued to bill in excess of the Workers' Compensation Fee Schedule. Mr. Cooperman died before resolution of the litigation.

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* Section 17 of the Public Health Law provides:

Section 17 Release of medical records. Upon the written request of any competent patient . . . an examining, consulting or treating physician or hospital must release and deliver, exclusive of personal notes of the said physician or hospital, copies of all x-rays, medical records and test records including all laboratory tests regarding that patient to any other designated physician or hospital, . . . Either the physician or hospital incurring the expense of providing copies of x-rays, medical records and test records including all laboratory tests pursuant to the provisions of this section may impose a reasonable charge to be paid by the person requesting the release and deliverance of such records as reimbursement for such expenses.

In December 1980, the Supreme Court, Albany County declared Section 29.2(a)(6) to be invalid to the extent that it relates to the transfer of records by physicians. The court agreed with the Medical Society's contention that the regulation, as it applies to the physicians, conflicts with statutory provisions.

The ruling of the Supreme Court, Albany County, has been affirmed by the Supreme Court, Appellate Division, Third Department.

On June 30, 1981, a preliminary injunction was granted in petitioner's favor by the Supreme Court, New York County. The preliminary injunction was granted without reference to a named individual.

On June 4, 1982, the Supreme Court, New York County, dismissed the proceeding as moot. In dismissing the case, the court noted that the present Chairman of the Workers' Compensation Board, William Kroeger, in a sworn written statement, indicated that he has no intention of taking punitive action against the petitioner for her billing practices.

The Medical Society had sought leave for permission to appear as amicus curiae in order to argue the position that the Chairman of the Workers' Compensation Board does not have the authority to remove a physician's Workers' Compensation authorization for billing usual and customary fees, even if such fees are in excess of the medical fee schedule. Since the case was dismissed as moot, the court did not address the issue raised in the Medical Society's brief.

III. Committees: The General Counsel has continued to provide staff support and legal advice to committees assigned to his Division.

(a) *House Committee on Bylaws.* The assistance given to this committee is two-fold. The General Counsel provides the necessary expertise to insure that the changes proposed with respect to the Bylaws of this Society are both legally permissible and are enacted in a proper fashion. In addition, this office provides the administrative services which are required.

(b) *Ethics Committee.* This office has continued to work with the Committee in regard to the formulation of ethical opinions concerning a myriad of subjects dealing with the practice of medicine.

(c) *Professional Medical Liability Insurance and Defense Board.* The General Counsel continues to sit monthly with the Board.

(d) *Judicial Council.* The General Counsel provides legal advice to the Judicial Council during all stages of appeal proceedings. There were no appeals filed during the past year.

(e) *Ad Hoc Committe on "Do Not Resuscitate" (DNR) Orders.* The General Counsel was appointed to advise the Ad Hoc Committee of the Council which was named to study a position regarding "DNR" orders for terminally ill patients.

IV. Meetings: The following is a list of some of the forums and meetings attended by the General Counsel:

- With the Director of the Division of Medical Services, the General Counsel met with the Chairman of the Workers' Compensation Board to discuss issues relating to Workers' Compensation.
- Attended a conference, "The Legal and Ethical Aspects of Treatment for Critically and Terminally Ill Patients," sponsored by the American Society of Law and Medicine (The Medical Society was included among the cooperating sponsors).
- Attended a meeting of the Society of Medical Association Counsel which was held in Chicago, Illinois, on June 11–12, 1982. The participants included counsel for the various state medical societies. Numerous topics were discussed concerning common issues facing the state medical societies.
- Attended a seminar sponsored by the American Society of Association Executives on July 7, 1982, in Washington, D.C., concerning antitrust issues relating to not-for-profit associations.

V. Miscellaneous: The Office of General Counsel reports directly to the Council regarding the status of proposed revisions to the constitution and bylaws of district branches and county medical societies. The General Counsel is charged with advising the Council that all revisions comply with the Bylaws of the Medical Society of the State of New York, as well as state and federal law.

The Office of General Counsel has provided the administrative assistance to set up the numerous ad hoc committees of the Council to hear appeals from recommendations of the Professional Medical Liability Insurance and Defense Board. Mrs. Joan Grimm, in particular, has devoted substantial time to set up these committees. The General Counsel remains available to provide technical assistance when required.

COMMENTS

This Division lost its General Counsel with the untimely passing of J. Richard Burns, J.D., on March 12, 1982. We replaced Mr. Burns with Donald R. Moy, J.D., and under his present leadership this Division has maintained its high level of efficiency.

There is no question that the Office of General Counsel continues to turn out an unusually large amount of work. The amount of work has increased to such an extent that I have instructed Mr. Moy to seek an assistant, and he is presently undertaking that chore. There is no doubt that we are becoming more and more involved with litigation and, as I commented last year in my report, it is unfortunate that we must resort to this tactic to get redress from many of the rules and regulations which are being promulgated against us.

We should also like to announce with great pleasure our association with the law firm of LeBoeuf, Lamb, Leiby and MacRae on a yearly retainer basis. Our association with such a prestigious law firm should serve us well considering the great amount of legal problems which we have encountered.

DIVISION OF GOVERNMENTAL AFFAIRS

General Overview. Due to the prolonged illness of the Director, which rendered him unable to perform his duties since September, 1981, the Assistant Director assumed primary responsibility for directing the activities of the Division. During that time, the MSSNY Albany Legislative Office was established across the street from the Legislative Office Building in Albany to develop a continuous liaison with the Legislature, the agencies of government and our Albany legislative representatives. The activities of this Office have since been expanded to include the regular communication of current legislative information to county and specialty societies and the coordination of combined legislative efforts to influence the Legislature regarding the important issues affecting the medical profession.

With the announcement of last year's medical liability insurance premium rate increase in October, 1981, and the establishment of a Legislative Executive Task Force on Malpractice by the Governor, the Division of Governmental Affairs, in conjunction with the Department of Research and Development and Legislative Counsel, prepared an extensive review of malpractice reform legislation enacted or considered in each of the fifty states. After an extensive review of all of the legislative material thus gathered and analyzed, a comprehensive "omnibus malpractice bill" was prepared under the auspices of the State Medical Society's Ad Hoc Committee on Malpractice. This omnibus bill was circulated to all of the members of the Governor's Task Force and ultimately was introduced into the Legislature in March of this year when it appeared that the Governor's Task Force had become bogged down.

Within two weeks, the Governor's Office circulated a comprehensive bill of its own which included a version of the major feature of the State Medical Society's proposal, namely provisions for the establishment of a catastrophic fund to be financed, in part, by a surcharge on health insurers. The Governor's proposal recognized not only that "the escalation of medical malpractice premium rates constitutes a critical threat to the health care delivery system in this state," but also that "the risk of medical liability and the costs of medical malpractice are, in significant part, a component of the aggregate cost of our health care delivery system" and that "it is therefore proper to create a medical malpractice catastrophe fund which will provide a more precise mechanism through which a part of the costs of medical malpractice will be directly assumed by and distributed among the beneficiaries of health care delivery system of this state."

The distribution and endorsement by the Governor of this proposal which is the most significant and controversial malpractice reform proposal ever endorsed by any administration anywhere in this country is even more notable when it is recognized that less than three years ago the Governor's Special Assistant for Health Affairs, appearing as a spokesman for the Governor, claimed that "the record on the handling of the medical malpractice problem during the Carey Administration speaks for itself. The crisis no longer exists, and its abatement can only be regarded as an extraordinary example of rational and responsible government intervention."

In anticipation of opposition by health insurers to the Governor's bill, your Albany representatives prepared a package of materials, including a statement of the seriousness of the problem, a response to the expected objections raised by the health insurers, a synopsis of the main features of the proposal, and a sample letter to the legislators. This package was transmitted to every county medical society president and executive, to every specialty society and to members of the Council. In addition, a *Hot Line* was prepared and mailed to every individual member of the Society. A follow-up letter was sent by our Division of Governmental Affairs to each specialty society seeking to coordinate efforts to secure enactment of legislation based on the catastrophic fund concept in the Governor's bill. In addition, several important meetings were held with legislative leaders, representatives of the health insurers and the Governor's office to seek to develop modifications to the proposal which would be acceptable to all concerned parties.

In view of the extensive campaign in opposition to the Governor's proposal which was orchestrated by the health insurers of this state, it should not be surprising that this revolutionary concept was not embraced by the entire Legislature at its first unveiling. Several modifications to this concept, which were prepared and circulated to the Task Force by our Albany representatives, are still being considered. The fatal blow to the State Society's efforts to secure significant malpractice reform legislation during the 1982 Legislative Session, however, was dealt not by the health insurance community, but by the Insurance Department when it became clear that the Department had decided to postpone indefinitely its determination on the insurance rates filed by the medical liability insurance companies. The Legislature quickly assumed that without an impending dramatic increase in malpractice insurance rates, a true crisis did not exist and, therefore, dramatic legislative action was not yet required. Consequently, the Legislature recessed without having taken any action on malpractice proposals.

In the fall of 1981, the Division of Governmental Affairs, in conjunction with the Department of Research and Development, commenced a comprehensive survey of nurse practitioner legislation enacted in other states in order to formulate specific recommendations on proposals to expand the practice of nursing being advanced in this state. As a result of the information which was gathered and analyzed in the survey, a series of recommendations were prepared by the Albany Legislative Office and Legislative Counsel; which were presented in a comprehensive report at the Collegium on Expanded Nurse Practice in January, 1982, and in subsequent meetings and negotiations with involved legislators and their staff.

Attempts by sponsors of the nurse practitioner proposal to capitalize on confusion created by their own statements to the press and the erroneous articles which subsequently appeared resulted in an all-out extensive campaign, directed by the Albany Legislative Office, to familiarize the Legislature with the Society's vehement and unreserved opposition to the proposed bill. Strong statements in opposition were immediately distributed to the entire Legislature. Contacts were made with all county medical societies and with every major specialty society to encourage their strongest efforts to communicate their opposition to the Legislature. Legislators on key committees were contacted personally by our Albany representatives to eliminate any possible misunderstanding as to the position of the medical profession on the proposed bill. As a result of this massive effort, and the intense opposition which was generated, the proposal, which previously had been expected to pass the Assembly with ease, was never brought to the floor in either house of the Legislature.

Other significant lobbying efforts led by the Albany Office and our Legislative Counsel resulted in the unexpected defeat in the Consumer Affairs Committee of the Assembly of a bill which had passed that house in previous sessions by significant margins. The bill, the so-called "Generic Drug Bill," consequently died in Committee. As a result of another major effort led by the Albany Office, the "Optometric Drug Bill" was overwhelmingly defeated in a floor vote by the entire Assembly and efforts by sponsors of the bill to gain reconsideration of the vote by the Assembly were frustrated.

Another key bill which failed to reach the floor in either house of the Legislature solely because of the opposition of the State Medical Society was the "Access to Medical Records Bill" which would have altered the traditional concept of physician ownership and control of the records.

Other key proposals which were defeated by lobbying efforts on behalf of the State Medical Society include:

— a bill to expand the practice of podiatry, which was strongly advocated and promoted by that profession, was held in Committee in both houses due to the opposition of the State Medical Society.

— a bill to expand the permissible use of X-rays by chiropractors was held in Committee in the Senate due to the efforts of our Albany representatives.

— a bill to permit nurses to bill independently for their services, which had been reported to the floor of the Assembly during the final week of the Session, was withheld from a vote after personal contacts with several legislators caused the bill to be laid aside.

— a bill to reopen all cases involving DES (diethylstilbestrol) was amended at the urging of our Albany representatives to exclude any application to physicians.

— a bill to make malpractice panels voluntary, which supporters sought to push through in the final hours of the Session, was recommitted to Committee at the urging of our Albany representatives.

— a last minute effort to revise the medical discipline process was frustrated when our Albany representatives communicated the opposition of the State Society against such an effort.

Numerous other proposals including bills on acupuncture, psychotherapy, naturopathy, and the extension of medical fee schedules were held in committee due to the opposition of the State Medical Society. A complete report on the final status of all bills, which were actively supported or opposed on behalf of the State Society during the 1982 Session, will be available at the House of Delegates meeting.

Albany Operations. The Albany Legislative Office, in addition to its duties directly involving the legislative process in Albany, which includes such routine matters as the screening of Legislative Index materials, the examination and referral of legislation, the gathering of background information relative to legislative issues, the preparation of legislative memos and statements and their appropriate dissemination, regularly and routinely screens the Federal Register, the New York State Register, notices of public and legislative hearings, releases from the various agencies and departments, publications of other health care groups, and voluminous materials and statements from the American Medical Association. Any announcement, notice or item which is considered to be of importance or interest to any other Division or Department of the Society is immediately referred for information, review and comment, as appropriate.

As was reported previously, this Session was marked by the establishment of our Albany Legislative Office and the concomitant inauguration of an intensified effort to develop a closer and continuous relationship with the Legislature, governmental agencies and our Legislative Counsel.

Concentrating on the staffs of certain key committees, the Albany Office successfuly developed working relationships with key staff members of the Senate and Assembly Insurance, Higher Education and Health Committees. These relationships resulted in the early communication to the Society of new developments on proposals affecting health care, and enabled the Society to have meaningful input regarding the formulation of these proposals.

The Albany Legislative Office also served as the rallying center for the efforts mounted in opposition to the nurse practitioner bill, the generic drug bill and the optometric drug bill. Through calls and communications to key contact physicians and to country and specialty societies, intensive grass-roots efforts to defeat these proposals were successfully generated.

Working closely with our Legislative Counsel, our Albany Office collaborated in the preparation of the omnibus malpractice bill, the several options to the Governor's proposal and in the development of an extensive review and analysis of the nurse practitioner legislative reports and proposals.

The Albany Legislative Office also supervised the weekly production of the legislative newsletter of our State Medical Society, the *Capitol News*, which has been published in Albany during each session of the Legislature since 1965. This publication was delivered each week to members of the Legislature, county medical society officers and executives and key physicians throughout the State. The *Capitol News* is designed to keep its readers abreast of important developments in health legislation in New York State and to advise them of the opinion of the State Medical Society on the key health issues which are being discussed in the Legislature. To date, 20 issues have been distributed this year.

The Albany Legislative Office is also responsible for the review of state and federal legislation pertaining to health care and the practice of medicine. Extensive files are maintained on key topics and issues which arise concerning the relationship of medicine and government, as well as on individual bills which are introduced in the State Legislature and in Congress.

During the 1981–82 State Legislative Session of the New York State Legislature approximately 23,500 bills have been introduced. These bills were screened by staff and by Legislative Counsel. Those involving health care (more than ten percent) were referred for analysis and comment to the appropriate Divisions within the State Medical Society. These comments, as well as recommendations from county medical society leaders via the Legislation Opinion Report of *Capitol News*, were considered along with information in our Division files and previous memoranda prepared by Legislative Counsel in establishing the State Society's position on all health legislation. Over the past two years, memoranda addressed to more than 160 specific legislative proposals were prepared with the cooperation and approval of Legislative Counsel and sent to legislators. This teamwork of personal contact and written communications was the key to success in gaining legislative approval of some of our bills and averting a massive number of undesirable measures.

Headquarters Activities. The Albany activities received strong back-up support from the Division staff at headquarters in Lake Success. The staff maintained extensive files on both state and federal legislative proposals and issues and assisted in the preparation and dissemination of legislative memoranda and divisional reports. The staff also cooperated with other Society Divisions by providing them with necessary information and seeking their advice and recommendations on pending legislation and regulations. Memoranda on the more than 160 individual legislative proposals previously mentioned were distributed not only to the legislators, but to members of the State Medical Society Council, Board of Trustees, State Legislation Committee, and to staffed county medical societies.

Through our legislation information center, the staff provided information and materials for publication in the *News of New York* and assisted in the preparation of *Hot Line* communications to our members. Varied requests for information from county medical societies, individual members, the AMA and others were answered as quickly as possible. In addition, suggestions and opinions obtained from individual members and county medical societies regarding legislative issues were tabulated and recorded for use in preparing the State Society's positions on specific legislation.

Continuing the practice started a few years ago, a 33 page brochure presenting a concise report on health bills of interest to the medical profession acted upon during the 1981 session of the State Legislature was prepared and widely distributed. A similar brochure for the 1982 session is in the process of being prepared.

State Legislation Committee. The Division of Governmental Affairs provided staff support to the State Legislation Committee. In this capacity, the staff worked closely with the committee and under its direction. It is the responsibility of the Division to apprise the committee of activities in Albany, make the necessary preparations for meetings, assist in conducting the meetings and in the preparation of reports to the Council and House of Delegates.

The Division staffed two State Legislation Committee meetings. The first was held on September 24, 1981, at headquarters. The purpose of this meeting was to prepare a report to the House of Delegates recommending MSSNY's 1982 State Legislation Program. The second meeting was held in Albany on March 15, 1982, to review the early activities of the 1981–82 legislative session and to consider resolutions referred to the Committee by the Council and the House of Delegates. The Committee reviewed new proposals which had been introduced during the early weeks of the session and discussed the topics which were likely to become the major health care issues of the ongoing session.

Federal Legislation Committee. The Division is responsible for providing similar staff assistance to the Federal Legislation Committee. The staff worked closely with the Chairman and Committee members, and under their supervision. The Division provided the Committee with information on federal health bills and, working closely with AMA staff, exchanged data of mutual interest. At the request of the AMA, communications concerning MSSNY's positions on bills about to be considered by the Congress were quickly dispatched to New York's Congressional Delegation over the signature of our Executive Vice-President.

Public Meetings and Private Conferences. In addition to his participation in the activities previously reported, the Assistant Director, on behalf of the Division, participated in numerous important meetings regarding malpractice, nurse practitioner legislation, and in many other meetings relating to major issues of interest to the medical profession.

New York State Association of the Professions. The Assistant Director, on behalf of the Director, attended meetings of the Board of Directors and of the Legislation Committee of the New York State Association of the Professions, and maintained continuous liaison with its Legislative Chairman on issues of common interest.

New York Medical Political Action Committee. The Division provides supportive information and assistance to the New York Medical Political Action Committee (NYMPAC), including a yearly analysis of legislator responsiveness to the legislative goals and positions of the medical profession, a complete analysis of election districts and voting patterns, and legal advice regarding proposed PAC activities.

COMMENTS

It is with great regret that we announce the retirement of Martin J. Tracey, J.D., as Director of this Division. As you know Mr. Tracey underwent serious upper GI surgery, and it was felt that the time had come for his retirement. I should like to take notice of Marty's long contribution to the affairs of this Society and state for the benefit of the House of Delegates that we shall miss him very much. I should also like to take official notice of his contributions to this Society. The activities of this Division continue to elicit many comments, both pro and con, concerning the role that the State Society plays in legislative matters. There is no question that the physical presence of an office in Albany has greatly contributed toward greater efficiency in this Division. I shall offer further remarks about our general effectiveness in governmental affairs at the conclusion of my report.

DIVISION OF INSURANCE AND MEMBERSHIP BENEFITS

Bernard M. Jackson, C.L.U., *Director*

General Insurance. Approximately 9,814 policies have been issued insuring our physician members, their dependents and key employees who have enrolled in the Medical Society of the State of New York Supplemental Insurance Programs. The programs consist of Group Life, Disability Income, Professional Overhead Expense, In-Hospital Indemnity and Accidental Death and Dismemberment. Participation increased in all plans this past year. All of our group life and health insurance programs feature a special renewal guarantee.

Since the inception of our General Insurance programs in 1974, over $10,000 in benefits have been paid to our physician members, their families and key employees. Over $500,000 in dividends have been paid to our physician members insured under our Group Life Insurance plan.

We have been advised that a projected group life dividend of approximately 41.8 percent for a total of $230,814 will probably be paid this year to the participating physician members in our Group Life Insurance Program.

The maximum monthly protection available under our Supplemental Professional Office Overhead Program was increased to $2,500 per month ($5,000 per month in all Continental Programs). Our Supplemental In-Hospital Indemnity Plan was improved with an increase in the maximum protection to $100 per day in coverage. The rate structure of the Accidental Death and Dismemberment Program was reduced by approximately 13 percent, applying to all current Accidental Death and Dismemberment Contracts and new policies in our program.

The excess earned premium over paid and incurred losses for all state sponsored Continental programs from inception to December 31, 1981, is $2,527,850.

Hundreds of insured physicians have written letters to the Medical Society of the State of New York, which compliment the excellent benefit payments they have received.

A comprehensive multi-peril office package, which was specially designed for the Medical Society of the State of New York, was implemented. Thus far, over 2,300 physician members have expressed an interest in this program.

The General Insurance Committee and staff continue to explore and review other forms of insurance for the personal and professional needs of our physician members. These include a Disability Benefits Law Insurance Program, a comprehensive Major Medical Plan, a Medicare Supplement, a Dental Program and Group Auto and Homeowners Insurance. It should be noted that the underwriting market for some of these proposed programs is limited, due to the adverse experience of the underwriting companies.

The General Insurance Committee and staff continue to study the feasibility of administering some aspects of our General Insurance Program.

Membership Benefits. The theme "Membership Pays, It Does Not Cost," continued to be developed and expanded by the Membership Benefits Committee and the Division of Insurance and Membership Benefits. New benefit programs, including a sophisticated accounting system, a discount program for certain medical text books, rare coins purchased through an approved numismatic organization at special prices, were reviewed by staff and the Membership Benefits Committee referred them to the Council for approval. In addition, a travel program to London, England, satisfying all Category 1 CME credits was planned for our physician members and their spouses. All these programs feature special discounts and service for our physician members and their families.

The Membership Benefits Committee has recommended, and the Council has approved, a survey of our membership to determine the interest in forming a Federal Credit Union for the Medical Society of the State of New York.

The Director of the Division of Insurance and Membership Benefits is exploring the possibility of publishing a Physicians Benefits Magazine paid for by the various approved vendors of membership benefits and other commercial enterprises.

Periodic seminars are being held for the benefit of our physician members on subjects ranging from pension programming and financial analysis to the use of computers in medical practice.

Thousands of requests from our physician members, both written and telephoned, are serviced annually in a highly professional manner. An analysis of these requests show the most popular programs to be purchasing and leasing cars at group discounts, purchasing major appliances at wholesale prices, and our Group Insurance Programs.

Administrative Committee for the Medical Society of the State of New York Pension Program. The overall assets of the Medical Society of the State of New York sponsored pension program for physician members increased over $1,500,000 to a total of approximately $2,700,000 in the HR-10, Corporate Pension and IRA Programs.

During the past year, the Medical Society of the State of New York replaced Chemical Bank as the Trustee for our program, with the Long Island Trust Company. The decision on the part of Chemical Bank to withdraw as Trustee in our pension program reflected a change in their corporate philosophy, and is in no way a criticism of our program. Chemical Bank is withdrawing as Trustee from all similar programs. The fees that the Long Island Trust Company will charge are comparable to those that we paid Chemical Bank.

COMMENTS

Mr. Jackson's Division has continued to function well, and there is no question that under his able leadership we are constantly revising and upgrading our membership benefits. There continues to be some friction between some county societies' programs and the general offerings of our State endorsed administrator. I trust that these differences will continue to be very slight, and that they will not affect our overall goal of membership benefits to all members of our Society.

DIVISION OF MEDICAL SERVICES

Robert J. O'Connor, M.D., *Director*

The annual report of the Director of the Division of Medical Services is transmitted herewith and covers the period between August 1, 1981, and July 1, 1982. It is devoted essentially to the Division activities that are not directly the result of committee functions, but rather those staff endeavors arising out of day-to-day problems presented to the Division by physicians throughout the State. The areas discussed in this report are not in any specific order but do cover the many concerns of the MSSNY membership.

Ombudsman Program. The requests for assistance in this program have been increasing rapidly. In spite of our stipulation that problems be first presented to the proper county medical society, the Division receives many and, in fact, the majority of requests for help directly from the physician. These requests have been honored as received but really should be routed through the local society so that they can help if possible but, more importantly, to become aware of the problems that their members are encountering.

Since the last report, approximately 250 requests for help have been received and processed from all over the State, but it is interesting to note that the vast majority of the inquiries are generated from the areas of Westchester, metropolitan New York, and Long Island. Roughly, the breakdown is about a 4 to 1 from downstate vs. upstate. This is probably only a manifestation of distribution of physicians rather than a basic fault in the system.

The inquiries received cover many areas of concern and involve all types of third-party carriers, reimbursement policies, administrative practices, social programs (Title XIX, XVIII, V), State Workers' Compensation, Federal Workers' Compensation, Champus, plus numerous miscellaneous questions on many topics. The Division has been able to resolve most outstanding fee problems and to clarify complex administrative procedures.

The Ombudsman Program has served as an excellent public relations activity — both from the MSSNY and the physician's aspect, as well as MSSNY and the third-party carriers. The latter are taking a greater interest in MSSNY opinions, and frequently call us for advice on procedures, etc.

Interface with Third-Party Insurers. During this period, the Division of Medical Services has established valuable and effective liaison with key representatives of federal, state, voluntary, and commercial health insurance programs. Ongoing meetings with the aforementioned personnel (both initiated by us and them) enable the Director and Assistant Director of the Division to communicate and resolve many of MSSNY's concerns regarding physician reimbursement and medical policy matters under the various health insurance programs. In addition, the meetings provide opportunities to resolve specific claim problems referred to us by our membership, under the MSSNY Ombudsman Program.

Personal lines of communication between the MSSNY Division of Medical Services and key third-party health insurance personnel have been established as follows:

1. Medicaid. Bimonthly meetings have been arranged with the Medicaid Fiscal Agent, MCAUTO Systems Group, Inc. (MSGI) concerning the Medicaid Management Information System (MMIS). Through MSGI, staff has also managed to conduct liaison with representatives of the Department of Social Services (DSS) to obtain assistance concerning aspects of the Medicaid Program that are not the responsibility of the Fiscal Agent, e.g., medical claims policy, physician reimbursement, most pended claims matters, etc.

Liaison has also been established with the DSS Division of Program Integrity in an effort to resolve problems related to physician Medicaid refund requests. Meetings with this DSS Division will be held as necessary. It is planned to invite county medical society (Broome County Medical Society, Inc., etc.) representatives to participate in these discussions.

In addition, meetings of the Transition Advisory Board of the DSS have been attended on a monthly basis in Albany and New York City since April, 1982, concerning the MMIS move to Albany. At these meetings the interests and concerns of MSSNY's membership regarding the transition are conveyed to the DSS and Fiscal Agent representatives.

At this point, *it must be made very clear that the likelihood of an increase in allowed fees under this program is virtually zero.* The economic climate, as well as the uncertainty of what will come out of Washington, makes any positive movement in this direction most unlikely. However, we shall continue to pursue the frustrating efforts to achieve a realistic fee schedule.

2. No-Fault. Periodic meetings with members of the No-Fault Unit of the State Insurance Department have been arranged to take place as necessary. In the meantime, communication with the Unit is maintained on an ongoing basis. Through the Unit, Liaison has also been established with the American Arbitration Association (AAA) which handles arbitration claims for services provided prior to December 1, 1977.

3. Workers' Compensation (WC). Meetings with the Workers' Compensation Board (WCB) are maintained on a weekly basis and more frequently as necessary. This liaison has resulted in the periodic enhancement of the WC Fee Schedule, as well as establishing relations with pertinent WC carriers concerning individual claims problems, medical policy interpretations, etc.

In addition, the MSSNY Workers' Compensation and Occupational Health Committee, and the physicians serving on the Advisory Committee on the Fee Schedule and Allied Problems of the WCB, have continued to be active in all matters of WC administration. Many topics have been discussed and resolutions presented to the Council and then forwarded to the Chairman via the Advisory Committee. Most recommendations have been implemented or will be in the near future. While the question of Relative Value Scale changes can no longer be discussed as consistent with MSSNY's policy, many topics involving the WC Law and administrative rulings and regulations require MSSNY input. Active and positive participation in such areas continues.

It should also be noted that Mr. William Kroeger, the new Chairman of the WCB, succeeding the late Chairman, Arthur Cooperman, has demonstrated a keen awareness of physician problems in all areas, particularly malpractice, and has indicated a willingness to listen to MSSNY and to consider changes that would result in higher quality service to the injured worker. His interest has been well demonstrated by his addressing the Council on two occasions, and it is certain that he will do so again whenever the situations call for such an appearance. It is significant to note Mr. Kroeger's invitation for MSSNY to join with him in planning for the increasing importance of WC activities over the decade of the eighties. The Division of Medical Services is certain to play a leading role in this area.

4. Medicare. Communications with the Medicare Fiscal Intermediaries in the upstate and downstate areas have been enhanced resulting in increased staff contacts with key personnel of both divisions (see "Blue Shield" section following for further details on Medicare meetings). Communications are also maintained with pertinent branches of the Health Care Financing Administration (HCFA) concerning Medicare regulations, and developments impacting on physicians. Meetings have been held with members of the HCFA Program Validation Branch concerning physician surveys in the upstate and downstate areas relative to Medicare services. This liaison has resulted in improved relations between the HCFA and MSSNY, a better understanding of pertinent objectives, and mutual cooperation. This has developed into a series of meetings scheduled to take place in Erie, Niagara, Broome, and Monroe Counties to mutually discuss the activities of this Branch in these areas.

5. Blue Shield. Communications with the six Blue Shield plans in New York State have been reinforced wherein contacts with key personnel in each plan have resulted in expediting the resolution of individual physician claim problems and/or clarification of medical policy for dissemination to MSSNY members.

Bimonthly Medical Policy Advisory Committee (MPAC) meetings of Blue Cross and Blue Shield of Greater New York (BCBSGNY) are attended by the Division of Medical Services so that any plan or new product developments affecting the MSSNY membership may be monitored and discussed. In addition, a forum is provided for expressing MSSNY's views concerning plan operations and procedures impacting on physicians.

Quarterly meetings have been arranged with the Professional Affairs Division of BCBSGNY to discuss mutual concerns and/or problems regarding the Blue Shield and Medicare programs.

6. Commercial Carriers. Meetings with individual commercial carriers are planned as physician matters concerning these insurers arise. Currently, effective liaison has been formed with the Metropolitan Life Insurance Company in Kingston concerning the Statewide Major Medical Plan. The carrier has been most cooperative in regard to physician concerns and problems and has responded in a timely fashion.

In summary, the thrust of the Medical Services Division activities has been toward establishing new and reinforcing old lines of communication. This effort has been very successful and now keeps MSSNY highly visible to all areas of concern, and has resulted in discussions taking place more frequently before, rather than after, the fact. This activity will be constantly pursued and reinforced.

MEETINGS ATTENDED BY THE DIRECTOR, DIVISION OF MEDICAL SERVICES
From 7/1/81–6/30/82

	(No. of)
Speaking Engagement at Dutchess County Medical Society	1
Meetings with Chairman of WC Board	7
Meeting with Accounting Staff of WCB	1
WCB Arbitration Hearings	6
WCB Advisory Committee on the Medical Fee Schedule & Allied Problems	9
WCB Advisory Committee on Administrative Practices & Procedures	3
DSS — Medical Advisory Committee Meetings	2
Disability Determinations Board — Social Security Administration	5
BC/BS — Meetings with representatives of BC/BS	4
BC/BS Medical Policy Advisory Committee meetings	4
BC/BS Hospital Review and Planning Council	3
Meeting with Mayor Koch	1
Meeting with Senators Marchi and Connelly	1
HSA Board of Directors Meetings	5
Meeting with Market Opinion Research re Research Study	1
American Academy of Compensation Medicine	5
Speaking Engagement at Oneida County Medical Society	(days) 2
Visited Monroe County Medical Society — re Bradford	1
Meeting with Deputy Attorney General's Office Staff	1
Meeting with Attorneys for the Metropolitan Peer Review Council	1
Meeting at WCB re Medata	1
First District Branch Meetings	3
Meeting with Dr. Michael McGarvey and the Comitia Minora and the Board of Kings County Health Care Review Organization, Inc.	1
Met with Dr. Raul Pohorille re Medicaid Problems in Bronx County	1
Health Care Financing Administration Meeting with Senator Tarky Lombardi	1
Health Care Financing Administration "Joint Working and Technical Advisory Group for the Council on Health Care Financing"	3
Forum on Capital Financing for Health Care, Sponsored by the NYS Assembly Committees on Ways and Means and Health	1
Public Hearing on Relocation of WCB	1
New York Academy of Medicine Annual Conference	(day) 1
Senate Finance Committee re Medicaid	1
Lecture at Staten Island Hospital (CME)	1
Bradford Administrative Services (MMIS)	6
JCAH — Staten Island Hospital	1
Meeting at State Insurance Department	1
New York State Society of Internal Medicine Carriers Conference	1
Meeting with Drs. Bernard Jacobs and Max N. Howard	1
HANY Committee on Professional Affairs Human Resources	2
Meetings with Metropolitan Peer Review Council and Statewide PSR Council	2
Medicine/Business Coalition Meeting	1
AMA House of Delegates	(days) 4
MSSNY Annual Meeting	(days) 3
Meeting with PSRO Representatives at Kings County Health Care Review Organization, Inc.	1

MEETINGS ATTENDED BY ASSISTANT DIRECTOR DIVISION OF MEDICAL SERVICES
From 7/1/81–6/30/82

Note: Assistant Director started employment at MSSNY on 8/17/81

Blue Cross/Blue Shield of Greater New York-Medical Policy Advisory Committee at BC/BS of Greater New York	2
Bradford Administrative Services-MMIS	3
Bradford Administrative Services MMIS (with DSS)	1
HCFA-1500 Common Claim Form Signing Ceremony	1
Health Care Financing Administration (re Medicaid) in Albany, NY, with Senator Tarky J. Lombardi, Jr. (after arrival in Albany, meeting cancelled)	—

Medicaid Management Information System-Transition Advisory Board	
at Department of Social Services (NYC Office)	1
at Department of Social Services (Albany Office)	2
Annual Health Conference-Struggle for the Assurance of Access to Health Care	2
NYS Hospital Review and Planning Council	5
NYS Society of Internal Medicine (Carriers Conference)	1
Coalition of Concerned Medicaid Providers	2
Public Hearing of the Subcommittee on Health Insurance-Council on Health Care Financing	1
Public Hearing on Ambulatory Care in New York State-Council on Health Care Financing	1
Workers' Compensation (with Chairman)	1
Workers' Compensation Advisory Committee	1
Workers' Compensation Arbitration Hearings	2
Workers' Compensation (re Medata)	1
Kings County Professional Standards Review Organization	1

The following reports were attached to the annual report of the Division of Medical Services and are available to interested parties through the Office of the Executive Vice-President:

1. Highlights of the Omnibus Reconciliation Act of 1981
2. Update on No-Fault (Arbitration Procedures)
3. Update on No-Fault (Reimbursement Policy for Medical Services)
4. Update on No-Fault (Physician Rights re: Attorney Demands)
5. Update on Medicaid Provider Audits (Procedures)
6. Update on Medicaid (DSS Clarifications/Purchase of Bradford Administrative Services)
7. Facts about the New York State Medicaid (Medical Assistance) Program
8. Update on the Impact of President Reagan's Proposed 1983 Budget on Medicare and Medicaid
9. Update on Medicare Physician Audits, Upstate Counties
10. Update on Blue Shield of Central New York: Physician Reimbursement Increases Related to Malpractice Insurance Premiums
11. Update on Maryland Blue Shield: SID Freeze of Physician Profiles
12. Update on Public Hearing on Ambulatory Care in New York State
13. Update on Public Hearing on Health Insurance
14. Update on the Basic Activities of the Division of Medical Services (including the functions of the committees assigned to the Division of Medical Services)

COMMENTS

This Division continues to address what is probably the bulk of the Society's problems in the delivery of medical services. Medicare, Medicaid, Workers' Compensation and No-Fault continue to be very serious problems for the State Society. I must take special notice of the activities of Dr. O'Connor and his able assistant Mario Menghini. This Division continues to be overburdened with problems, and I want the House of Delegates to know that they have accomplished a great deal and continue to represent the State Society well in all of our negotiations with the State Regulatory Agencies. This Division had included extensive material in its report involving its meetings with these agencies, which are available for perusal to any members of the House of Delegates. I have intentionally omitted many of their reports because of the bulk involved.

Division of Membership

Mark J. Kafka, *Director*

The period from October, 1981, through June, 1982, served as the first full recruitment season for the Division of Membership.

During this time, the Division conducted mailings consisting of approximately 100,000 direct contacts with nonmember practicing physicians, residents and medical students; assisted county medical societies with the preparation and production of recruitment letters and the development of promotional brochures, and conducted a statewide series of practice management workshops for residents.

These efforts resulted in a 22.8 percent increase in the overall number of new members, exclusive of students, compared to the same period ended June 30, 1981. This included:

1. A 14 percent increase in the number of new active members (648 compared to 568);
2. A 6.6 percent increase in the number of new junior members (160 compared to 150);
3. An 82.3 percent increase in the number of new resident members (226 compared to 124), and
4. A net increase of more than 132 percent in the total student membership, which more than doubled to 1096, compared to 472 at this time last year.

It should be noted at this point that these figures understate the actual results, since there is an undetermined number of applications submitted to county medical societies that will not be processed until the fall.

The series of resident workshops continues to contribute to MSSNY's membership development efforts. A combined total of 254 residents participated in nine workshops conducted throughout the state in the fall of 1981 and spring of 1982. Of these, 149 now are members, 64 percent of potential.* The nine workshops cost MSSNY a total of only $979.66, including faculty, materials, meeting rooms and refreshments. That amounts to a cost of only $6.57 for each new member obtained from the program, and does not take into account the increasing goodwill generated among other participants and hospital administrators. The workshops thus continue to serve as cost-efficient vehicles for recruiting young physicians.

In addition to the obvious results in terms of recruitment, the year's mailings also contributed to the purging of some

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* Twenty-one participants were from out-of-state and therefore not eligible for membership. The total recruitment potential, therefore, was 233.

16,000 names from our nonmember file, for such reasons as verification of out-of-state physicians, incorrect addresses, deaths, etc. This is a significant reduction in the size of the file and will help realize considerable savings in annual printing and postage costs — potentially several thousands of dollars a year — and also provides MSSNY with a clearer insight into its market position.

Another more abstract result of the program has been an increasing awareness of and appreciation for membership development as a major organizational priority. This perhaps was best demonstrated by the departments of Physician Records and Computer Services, whose respective staffs have been extremely cooperative in adapting to new policies, processing increased work flows and servicing new (statistical) reporting requirements.

There are certain factors that must be considered in evaluating the initial results of the program. First, it should be recognized that the Division has been operating at less than full capacity, since its word processor has yet to be hooked up to communicate with MSSNY's computer. This not only limits the quality of recruitment packages, but also reduces our strategic flexibility.

Another factor is the continued adherence by county societies to antiquated application procedures that can serve as unnecessary obstacles to membership. Foremost among these are the requirements that applications be endorsed and that applicants attend a specified number of county society meetings prior to election.

These requirements are carry-overs from the days when organized medicine operated in a seller's market. Times, though, have changed. We are now in a buyer's market and it, therefore, is incumbent upon us to streamline our application procedures in order to make joining the federation as easy as is reasonably possible. Significantly, this is a position forcefully advocated by the American Association of Medical Society Executives.

Also inhibiting MSSNY's recruitment efforts is the fact that most county medical societies do not schedule meetings during the summer months and therefore also do not elect new members during this period. Although the delay technically may be only for three months, its impact is much deeper in terms of membership development. Consider in this respect a nonmember who receives an application in late April. He may not submit it to his county society until mid-May, in which case he will not be elected to membership until at least September, and, more so, his dues probably will be applied to the following year.

The consequnces of this policy are obvious: not only a loss of dues for both the county society and MSSNY, but also a potential loss of new members who may well be frustrated by the delay in processing their applications and by the fact that the county societies hold their dues during this time.

It of course is recognized that many county societies simply cannot hold meetings during the summer. As an alternative policy, however, we recommend extending a pending membership status, including benefits, to applicants during this extended period prior to their actual election.

These issues aside, it ultimately must be recognized that the Division's efforts are limited largely to supporting local recruitment programs conducted by county medical societies. County society involvement, however, has been somewhat less than overwhelming, with only 11 of 61 societies participating to varying degrees in MSSNY's cooperative program.

Queens thus far has been the most active of these county societies and its experience this year is indicative of the long-range potential of the overall program. Still in its initial phase, the Queens effort consisted of promotional mailings to its general nonmembership and mail follow-ups to MSSNY's contacts with newly licensed physicians. The results: after only eight months, Queens County more than doubled the number of new applications it received during the entire previous year. Consider the impact on MSSNY as more county societies duplicate the Queens experience.

This, however, has been only the initial phase of the program. In addition to an ongoing mail effort, Queens County is working with MSSNY staff to plan a recruitment phonathon for the fall of 1982, and the subsequent establishment of a system for hospital-based, personal peer contacts.

Finally, it cannot be overemphasizsed that many nonmembers do not perceive MSSNY as having a single tangible product whose value is sufficient to justify the cost of membership. This perception is evidenced by the fact that MSSNY's membership has been declining steadily for more than a decade.

This trend will not be reversed overnight without offering a new and valuable benefit to nonmembers. We rather strive for the long-term benefits of ongoing cultivation of targeted segments of nonmembers, especially younger practicing physicians, residents and students.

The program significantly was most successful this year in recruiting younger members of the profession, especially residents and medical students. Indeed, it is to these ranks that MSSNY must look for its long-term financial base, for its future leadership and to otherwise replenish a dues-paying membership that is declining for such reasons as retirements, deaths and a growing life membership. The Division, therefore, will continue to place its major recruitment priorities on these younger market segments.

Toward this end, the Division will emphasize increased involvement in the program by county medical societies, including both systemized direct mail communications and personal peer contacts. The ultimate objective, of course, is to duplicate Queens County's experience this year among most, if not all, of our metropolitan county societies.

Finally, in conclusion, it is appropriate at this point to recognize and commend the efforts of Eunice Skelly, Associate Director of the Division. In addition to her contributions to the Division's overall effort, Ms. Skelly also serves as liaison to the Medical Student Section and is singly responsible for more than doubling its membership during the academic year just ended. Ms. Catherine Quigley also contributed considerably to the success of our first year effort, serving both timelessly and creatively as the Division's word processor operator and office manager.

COMMENTS

This Division, of course, represents the lifeblood of our organization, and it is in this area that we must dedicate many of our efforts to not only increasing the number of members, but developing better means of membership retention. Mark Kafka and Eunice Skelly have done an outstanding job, and it is interesting to note that our cooperation with the AMA has increased considerably even though the number of our members who belong to the AMA continues to decline.

DEPARTMENT OF RESEARCH AND DEVELOPMENT

Deborah Siegel, *Director*

The Department of Research and Development continues to assist other Medical Society of the State of New York divisions, both in the research and in the background materials for various reports and projects. Additionally, staff has provided assistance to individual physicians in MSSNY-related endeavors, as well as providing background materials to a variety of organizations in such areas as medical liability rates, medical liability legislation and background data, nurse practitioner data, and coalition materials. Many of our various projects and reports have been requested by state and local medical societies, health and political organizations and businesses.

Staff is also responsible for the Medicine/Business Coalition of New York State's administrative work which includes correspondence, reviewing the literature for relevant articles, background and agenda materials, and general administrative work.

The Department maintains the validity of all projects by yearly updating of statistics and laws with regard to appropriate projects.

An ongoing review of pertinent articles enables staff to alert Research and Development Committee members to potential undertakings for the Committee in terms of long-range planning and future projects.

A report on the specific projects in their various stages of development follows.

Demographic Survey of Physicians in New York State. The Demographic Survey of Physicians in New York State (Resolution 79-16) continued to occupy priority status. It is expected to be published this summer (1982), and will yield the following data: Physicians' names, addresses, hospital appointments, age, sex, membership status, specialty and license number. The information is broken down geographically and physician counts are compared with population groups in specific areas to determine physician/population and primary care physician/population ratios.

As part of the Demographic Survey, staff intends to plot practicing physicians on a map of contiguous areas of New York State to realistically determine physician shortages taking physician practice hours, geographic location and variables, and population into account. The project is planned for the fall and winter of 1982.

Medicine/Business Coalition of New York State. 1981–1982 was a year of expansion and progression for the Medicine/Business Coalition of New York State (formerly known as the Corporate Visitation Program). Agenda items were prioritized. Among the items discussed in depth: the medical liability insurance crisis, physician education, and utilization review.

The Coalition, in addition to representing organized medicine, currently represents Chase Manhattan Bank, Citibank, Eastman Kodak Company, the Fairfield/Westchester Business Group on Health, General Electric, General Motors, International Business Machines, Metropolitan Life Insurance, the New York Business Group on Health, New York Telephone Company and Revlon Corporation.

Medical Society of the State of New York's Co-Chairman is Ralph M. Schwartz, M.D., Past-President, and the Business Co-Chairman is Russell F. Schuck of IBM. The chairmen alternate presiding, and business and medicine alternate hosting the meetings.

The group meets approximately every two months, and decided to draw up formal bylaws and incorporate at a future time.

The Coalition is nearing completion on a brochure entitled "Health Care Challenge for the 80s." This effort reflects both medicine's and business' concern over rising costs, and what the individual can do to ease the problem.

The Medicine/Business Coalition of New York State will continue to address programs and projects affecting health care providers, business and the citizens of New York State in relation to delivery of health care, and access to it, while attempting to devise methods of keeping costs down while maintaining quality.

Medical Malpractice Legislation Chart. The Medical Malpractice Legislation Chart, put together last year, continues to be in demand not only in this country, but internationally as well. The chart was updated in the spring and will be updated on a yearly basis. The chart and accompanying definitions appeared in the November, 1981, issue of the *New York State Journal of Medicine.*

Liability Rates Study. A cross-country sampling of medical liability rates, current as of last fall, was charted at Administration's request. We have had innumerable requests nationwide for reprints of the chart and accompanying article which was printed in the September, 1982, issue of the *New York State Journal of Medicine.* The survey clearly indicated higher than average rates in New York.

Nurse Practitioner Chart. In conjunction with the Division of Governmental Affairs, Research and Development charted nurse practitioner legislation across the country and defined some of the terms used within the written laws to enable those examining nurse practitioner legislation to more fully understand it. Educational requirements, supervisory requirements, and prescription writing authority were included in the chart. In addition to requests from states and organizations, the chart and accompanying information will be printed in the *New York State Journal of Medicine.* Additionally, the magazine *Medical Economics* requested reprinting rights with credit given to the Medical Society of the State of New York.

The publishing of the Medical Malpractice Legislation Chart, the Medical Liability Rates Chart and the Nurse Practitioner Legislation Chart allowed the *New York State Journal of Medicine* the distinction of being the only Journal nationwide to have printed such cross-country, comprehensive materials. Because reprint requests were numerous, it gave the Medical Society of the State of New York and the *Journal* more visibility.

For-Profit Corporation Report. On September 10, 1981, the Council approved an undertaking of a feasibility study of a "For-Profit Corporation" between the Division of Insurance and Membership Benefits and the Department of Research and Development. A number of organizations were contacted, and the expertise of in-house division directors was sought. Based on the recommendation of the Research and Development Committee, the determination of the report was that a Medical Society of the State of New York owned "For-Profit Corporation" was premature at this time. This was primarily due to the fact that our unrelated income was at a level whereby our tax-exempt status was not threatened, and that our primary concern, at this time, would be to develop new areas of producing unrelated income in an effort to alleviate the inevitability of a dues increase. Additionally, the Research and Development Committee suggested keeping a close watch on related aspects of the possibility of a "For-Profit Corporation," so that in its event, we are prepared legally, financially and internally.

Medical Staff Leaders. George T. C. Way, M.D., introduced a topic for consideration and study: that of the increasing importance of the role of the hospital in meeting physicians' needs. While this topic remains in the discussion stage, it will be addressed at the next Research and Development meeting (October 1 and 2, 1982).

The possibility of an education program for medical staff leaders and a Medical Society of the State of New York representative being at the medical staff leaders meeting at the hospital was discussed by the Committee.

Dr. Way spoke on this topic at the February, 1982, AMA Leadership Conference, and wrote an article which appeared in the *New York State Journal of Medicine.*

Paraprofessional Health Care Laws in New York State. As preparation for a potential Research and Development topic submitted by Asa P. Ruskin, M.D. (Redefining the Practice of Medicine), staff collected the Education Laws, Rules and Regulations, Commissioners' Regulations and Public Health Laws dealing with practitioners and paraprofessionals in the health care field in New York State (Physicians, Dentists, Veterinarians, Physical Therapists, Pharmacists, Podiatrists, Optometrists, Psychologists, Chiropractors, Nurses, Physicians Assistants, Specialists Assistants, Dental Hygienists, Physical Therapists Assistants, Ophthalmic Dispensers, Emergency Medical Technicians and Advanced Emergency Medical Technicians, X-Ray Technicians, X-Ray Therapy Technicians, Chest Radiographers).

Additionally, because the material was voluminous, abstracts of each law were prepared describing exactly what that particular profession could or could not do. Although this was in preparation for future discussion by the Research and Development Committee members concerning the major topic, we have had requests for this data from various counties in New York State.

Formation of a Coalition to Address Tort Reform. The Committee on Research and Development discussed the possibility of forming an association after the Association of California Tort Reform (ACTR) in consideration of the substitute resolution for Resolutions 81-32 and 81-51.

Milton Rosenberg, M.D., was disappointed with the lack of interest on the parts of the organizations he contacted in relation to this. It was suggested that the Medicine/Business Coalition of New York State be approached to see if they would be interested in such an effort.

The Executive Committee recommended that Dr. Siegel's request to reconsider the substitute resolution for Resolutions 81-32 and 81-51, be tabled until the mandate of the House of Delegates has been brought to the attention of the Medicine/Business Coalition. The Medicine/Business Coalition will be asked if they are interested in expanding the group to discuss matters of mutual interest in health care.

The Council, therefore, decided to table the recommendation made by Dr. Siegel to reconsider the substitute resolution for 81-32 and 81-51.

The Medicine/Business Coalition of New York State reported to the Council on March 25, 1982, that Dr. Rosenberg had presented the substitute resolution to the Coalition at its meeting on March 3, 1982. The following conclusions were reached:

> The Medicine/Business Coalition of New York State has decided, for the present time, to remain as originally planned; namely a coalition of Business and Medicine.
>
> The Medicine/Business Coalition of New York State is interested in reviewing changes in Tort Law to ameliorate the medical liability problem.

Specialty Society Representation in the House of Delegates. The Department of Research and Development is currently investigating specialty society representation in the House of Delegates to determine whether or not specialty societies were properly being represented, and, if not, how the situation might be rectified. The Council approved an in-depth study in November. Most of the necessary information has been researched and collected. Once charted and analyzed, it will be presented to the Council with appropriate recommendations.

Non-Member Survey. The feasibility of a nonmember survey was discussed. Milton Rosenberg, M.D., recommended that the best course of action to take at this time would be to investigate a professional organization that handles membership recruitment, and let a consultant advise us as to what specific direction to take. Staff was directed to contact the AMA to see if they had ever made a search of such organizations.

COMMENTS

Under Ms. Deborah Siegel's direction this Division has not only increased its activities but has become a very essential part of this organization. Probably the most important item is the approaching conclusion of the demographic study of physicians in New York State. This shall be forthcoming rather soon, and I am sure will be of invaluable assistance to all our members, as well as placing this Society in an excellent position of finally getting a handle on medical manpower in this State.

This Division also services our Medicine/Business Coalition. A broad-based area of goodwill and cooperation has been started in this area. The major accomplishment of this Coalition is the development of a brochure which deals with the high cost of medical care. It will be published shortly and distributed to physicians' offices, as well as by the major corporations as part of their indoctrination of employees.

Division of Scientific Activities

George J. Lawrence, Jr., M.D., *Director*

It is not possible to give a detailed report on all the activities of this Division without usurping a disproportionate share of space available for annual reports. Therefore, what follows will be an attempt to summarize the Division's most important and time-consuming activities, leaving the details to the annual reports of the committee chairmen. These chairmen, and the members of their committees, perform monumental services to the members of MSSNY at great personal sacrifice, for which we here express the gratitude of our membership. We urge all members to read the committee reports carefully, as they contain much information about the workings of MSSNY of which many members seem to be unaware.

Continuing Medical Education. The most dramatic occurrence in this Division since the original mandate requiring CME for continued membership in MSSNY was the response during 1981 and early 1982 to our requests for all members to report their CME activities in order to remain in good standing. It was extremely gratifying that, when all the urging, the protesting, and the reurging were over, only 51 members were dropped. Returns so far this year indicate that the onerous duty of reporting CME has been reluctantly accepted by our membership, in view of the possible alternatives which would be much more unpleasant.

Scientific Programming. The attendance at the Annual CME Assembly in June of this year increased considerably with the return of the meeting to a locale closer to New York City. Next year's CME Assembly will again be held at the Rye Town Hilton in Port Chester on May 13, 14 and 15, 1983. In succeeding years we shall be returning to New York City locations for the Assembly. Experience has now shown us that we can serve a greater number of our members by so doing. Plans are also being made to once again have joint meetings of the House of Delegates and the CME Assembly.

The Scientific Program Committee was resurveyed by the Accreditation Council for Continuing Medical Education in September of 1981, and as a result of the survey, we have been reaccredited for a period of four years. Through this Committee, MSSNY continues to be authorized to present CME programs that meet the criteria for Category 1 for all physicians.

Annual Meeting of the Commissions on Public Health and Education. The 25th Annual Meeting of the Commissions on Public Health and Education with the New York State Department of Health was once again held in Albany on May 14 and 15, 1982. At this meeting the chairmen of the committees in the Division of Scientific Activities met with their counterparts from the State Health Department. The meeting was also attended by the Commissioner of Health, David Axelrod, M.D., and the President of MSSNY, Milton Rosenberg, M.D., as well as by other high officers of MSSNY. Annual reports of all the committees were presented and discussed indepth. This meeting has traditionally served as a meeting ground for MSSNY and the NYSDH, where matters of great importance to the health of the citizens of New York State are thoroughly aired, and areas where we can join forces in their solutions are discussed and often agreed upon. These meetings are invaluable, and it is hoped they will continue.

Continuing Medical Education Survey Activities. Through its Subcommittee on Surveys, the CME Committee has continued to accredit institutions in New York State for CME. MSSNY continues this activity for the benefit of those institutions in the State who provide CME for physicians drawn mostly from their local areas. Institutions which attract physicians from many states to their programs are required to apply to the Accreditation Council for Continuing Medical Education for surveys. We are extremely grateful to those physicians who have participated in the CME surveys. They perform a valuable service with no monetary recompense. Without their dedicated contributions, MSSNY could not perform this important function.

"What Goes On In CME". The "Continuing Medical Education" section of the *New York State Journal of Medicine* aims at apprising members of the CME offerings available throughout the State to help them in keeping abreast of their CME responsibilities.

We attempt to accommodate all requests for publication, provided that we receive the announcements prior to our deadline dates. The announcements are published free of charge as a service MSSNY provides both to members and the institutions sponsoring the programs.

Physicians' Placement Bureau. The Physicians' Placement Bureau serves both members and nonmembers with assistance in matching positions available and physicians seeking opportunites in the State.

The "Physicians' Placement Opportunities" section of the *New York State Journal of Medicine* publishes a complete monthly list of the positions we have registered with our Bureau.

The Bureau has received many reports that it was responsible in matching physicians with communities seeking their help.

COMMENTS

This Division, of course, contains the greatest number of committees which meet periodically and account for perhaps one of the greater contributions the Medical Society of the State of New York makes toward the health of the people of the State of New York. This Division is also responsible for Continuing Medical Education, and we should like to draw the attention of the House of Delegates to the fact that of our over 20,000 members only 51 were dropped for failing to comply with mandated CME. We feel that, under the circumstances, this is an exceptional record and one of which this State Society should be quite proud. We recognize the attitude of some of our members in not wishing to comply with CME for purely hypothetical reasons, but it has turned out to be quite gratifying. We trust that those that have been dropped from membership will have a change of heart and return to the fold.

DIVISION OF SCIENTIFIC PUBLICATIONS

Alfred A. Angrist, M.D., *Director*

The Division of Scientific Publications continues its major activity of editing manuscripts for publication in the *New York State Journal of Medicine*, which is published and distributed monthly.

As in the past, the current policy of the *Journal* is to continue to keep physicians abreast of the changes and advances in medicine, particularly with respect to disease mechanism and therapeutic approaches to treatment and diagnosis.

The *Journal* continues to publish scientific articles, clinical case reports, a biannual index, the preliminary and final CME Assembly Programs, a section titled "What Goes On in Continuing Medical Education," Physician Placement advertisements, contemporary nutrition information, and a listing of books received and books reviewed.

Articles are obtained through critical selection from those submitted voluntarily and through solicitation. Preference for publication is based on subject material and style. The editors of the *Journal* select, promote, and initiate articles and editorials of interest to the Medical Society of the State of New York and to the readership of the *Journal*. This includes giving the reader an overview of the transactions of the various MSSNY committees, the Council, and the House of Delegates.

The editors of the *Journal* periodically meet and consult with the Publications Committee for review and discussion concerning the *Journal's* current and future policy changes.

Recognition of the 175th Anniversary of MSSNY is being noted on the cover of the *Journal* throughout 1982. In addition to this, for the year 1982, a section has been added titled "Serendipity In Our Files." In this section items of historic interest are being researched and reprinted from very early volumes of the *New York State Journal of Medicine*.

Journal advertising is controlled from the standpoint of merit and policy in collaboration with the Division of Advertising Sales and Meeting Services.

The Division is in the process of preparing data for the selection of the following awards: William Hammond Award for Distinguished Service to the *New York State Journal of Medicine;* Laurance D. Redway Award for Medical Writing; Albert H. Douglas, M.D., Memorial Award for Excellence in Clinical Teaching; and the Albion O. Bernstein, M.D., Award. The Albion O. Bernstein, M.D., Award is given to a physician, surgeon, or scientist who has recently made a widely beneficial scientific discovery in medicine, surgery, and/or the prevention of disease.

The activities of the Albion O. Bernstein Library of the Medical Society of the State of New York, during the 1981-1982 year has proceeded along established lines, carrying out its prescribed functions of serving the staff, the membership, and the public.

Approximately 100 new books were added to the collection, many of them new editions of titles already owned by the library. As is customary, many of the journals received were discontinued and some new ones added. Determinations were based on cost, use, and need. The total number of books in the library is approximately 1,500.

Usage statistics were as follows: Books Circulated — 270; Journals Circulated — 1,800; Interlibrary Loans Filled — 480; Reference Questions Answered — 1,450; Searches/Photocopies — 850; Attendance — 700.

The bound volumes of the *Transactions of the Society* (1807-1905) were microfiched. The microfiche cards can be read on the library's microfiche reader which, however, does not have printout capability. Since the use of this format of the literature is more cumbersome than the printed form, a finding tool to facilitate its utility has become a necessity. The librarian, therefore, has undertaken the compilation of an index.

COMMENTS

I should like at this time to announce that we have hired Dr. Angrist's replacement to undertake the editorship of the *New York State Journal of Medicine*. Dr. Angrist's replacement will be Dr. Alan Blum who is a native New Yorker and at the present time is Editor in Chief of the *Australian Medical Journal*. He comes well recommended, and will assume this position starting January 1, 1983. We know that Dr. Blum will continue the high standards which the *Journal* has set and we look forward as well to innovative methods of increasing the distribution of the *Journal*. At this time I will not comment on Dr. Angrist's contributions, but will save that for a future time when the Society, I'm sure, will honor Dr. Angrist for his many accomplishments.

This concludes my general comments on the specific divisions of the Medical Society of the State of New York, and I should now like to make a few philosophical remarks regarding the MSSNY.

During the past year we have been plagued with the perennial problems of continuing membership and the maintenance of financial stability without increasing dues. Overall, there has been a general decrease in membership, and it is difficult to pinpoint the exact causes. We have made every effort to stop the drain on our membership by trying to curtail the increasing number of life memberships. This has caused us some problems in that we have failed to address ourselves to the small number of our members who, for one reason or another, have completely retired from practice before the age of 70. If the member is in good health and does not claim financial hardship, he has no choice at the present time but to continue paying dues if he wishes to maintain his membership. In my opinion this does not really cause a problem, but the House may very well wish to address itself to this minor irritation.

Our financial position is excellent at the present time, and we have reached the point where our reserves are adequate. We have arrived at the accepted rule of thumb which states that we should have at least 50 percent of our annual operating budget in reserve. The problem with the MSSNY, as with any other membership organization, is that the bulk of our expenses are derived from member dues, and we have almost no other source to supplement income. For that reason I shall later in my report make a few remarks and recommendations which I hope will generate increased income. At the present time I am not recommending a dues increase, but the 1983 House of Delegates will have to consider a dues increase for fiscal year 1984 when we take into account cost-of-living increases, inflation, and the natural process of increasing our base salaries to our productive and trusted employees.

I should like to draw the attention of the House to the fact that there has not been a dues increase in at least five years, and because of the high interest rates we have been quite fortunate in building up our reserves without an increase in dues. This, however, will shortly come to an end considering the decreasing rates in interest.

The problems our Society encountered last year in the area of medical liability, the activities of federal and state regulatory agencies, and the encroachment of paraprofessionals into the medical profession have been mentioned in other reports. These three major items will continue to plague us, and I do not intend at this time to go into the details of what these three major items mean to the State Society. We shall continue to try and deal with them as best we can.

The more specific problems of our State Society are those of membership development and membership retention, the efficacy of our legislative efforts in Albany, the physician-patient relationship, the effectiveness of our public relations efforts, our relationship with the specialty societies, the role of the foreign medical graduate in our State Society affairs, and other analogous situations.

There are three specific areas which I would like the House to consider. These are: (1) A reexamination and reassessment of the relationship of the state's specialty societies with the Medical Society of the State of New York. For some time now I have been dissatisfied with the role of the sections in our society and it would seem to me that there should be a closer relationship between specialty societies and the MSSNY, above and beyond the present one of representation on the Interspecialty Committee. (2) An examination and reevaluation of the possibility of direct membership in MSSNY for certain classes of physicians. We have been experiencing some difficulty in the relationship of resident members with our local county societies, and I do believe that there's an area here which can be further explored so as to avoid long delay in membership for this category of physicians. (3) I made this recommendation to the House last year but the Reference Committee on Reports of Officers saw fit not to deal with my specific recommendation, which was for the Society to form an ad hoc committee to reevaluate the present site of our headquarters at Lake Success. This does not mean that we should move to some other location, but I do feel it incumbent on the House to, from time to time, reevaluate its present policies and, if the circumstances demand, take positive action. I, therefore, recommend that the House appoint an ad hoc committee to assess and reevaluate the present location of the MSSNY headquarters at Lake Success.

One of the reasons for making the above recommendation is that this Society must look for alternate methods of financing instead of the usual method of increasing dues from time to time. During the past year, the AMA dedicated its new building in Washington, DC, and at the present time is generating a considerable amount of money toward its operating expenses. I really believe that this Society is going to have to take a similar step at sometime in the future so as to build a sounder financial base. Considering the drain of membership dues on the average physician between the specialty societies, the MSSNY and other organizations, the time is rapidly coming when we shall be pricing ourselves out of the market. I, therefore, feel that this Society must look for additional sources of financing, one of which would be the purchase of a large building and the renting of excess space to other organizations. After all, nothing is forever, and often we must make decisions which are not vital for the moment but are in the best interest of the Medical Society forty or fifty years from now. I do believe that this Society has reached that turning point, and I call upon the House and its wisdom to look into the future and make those hard decisions which are required.

I should at this time like to acknowledge the great help which I have received from all my division directors. It is always bad policy to single out individuals, but in this case I must make exception and acknowledge the contributions of Irma Erickson as my Executive Associate, as well as her capable staff.

I should again like to thank all my colleagues and especially the Council for giving me the opportunity to serve this great Society.

Respectfully submitted,

Edward Siegel, M.D., *Executive Vice-President*

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

The report of the Executive Vice-President incorporated the in-depth reports of ten divisions, the Office of General Counsel and the Department of Research and Development. Your reference committee feels that the Executive Vice-President's innovation of this conjoint report is laudable and the smooth operation of all these divisions should be the source of much pride to him. We recommend that all delegates carefully read all the reports and his notable comments.

Your reference committee wishes to call attention to the decision to once again combine the Scientific Assembly with the Annual Meeting of the House of Delegates, beginning In 1985.

The committee is pleased to note the improved financial status of the *Journal*, through the streamlining of its pages and the increase of its advertising revenues.

We applaud the adoption of Guidelines for Release of Mailing Lists, developed to protect the confidentiality of our computer information. We were also impressed with the magnitude of legislative activity, particularly the screening of some 23,500 bills, 10% of which involve proposals on health care.

We call particular attention to the great help given to our individual members by the continual efforts of the Ombudsman Service.

Your reference committee appreciates the report of the strong efforts of the Society toward recruitment of members, but feels the need to caution against the apparent concentration on the younger physician group to the neglect of recruiting more established physicians.

Your reference committee wishes to express appreciation to all the MSSNY members for the remarkable degree of acceptance of mandated CME, as evidenced by the fact that only 51 of our members out of over 20,000 were dropped for failure to comply with the CME requirement for membership.

Lastly, your reference committee commends the Executive Vice-President for his efficient, successful administration of the Society's affairs.

⇛ Your reference committee recommends that the report of the Executive Vice-President be filed for information.

⇛ . . . *The annual report of the Executive Vice-President was* **FILED FOR INFORMATION** . . .

NEW YORK DELEGATION TO THE AMERICAN MEDICAL ASSOCIATION (ANNUAL)

To the House of Delegates, Ladies and Gentlemen:

INTERIM MEETING
LAS VEGAS, NEVADA
December 6 to 9, 1981

At the Interim Meeting in Las Vegas, Nevada, on December 6 to 9, 1981, the New York Delegation included the following:

Delegates: Edgar P. Berry, John L. Clowe, George L. Collins, Jr., Paul M. DeLuca, Richard D. Eberle, Ralph S. Emerson, John A. Finkbeiner, Joseph J. Kaufman, Morton Kurtz, Bernard J. Pisani, Milton Rosenberg, Ralph M. Schwartz, Joseph F. Shanaphy, Charles D. Sherman, Jr., and M. Theodore Tanenhaus.

Alternate Delegates: Charles N. Aswad, Allison B. Landolt, and Dattatraya G. Lanjewar.

Section Delegate: Russel H. Patterson.

Also: Kavasseri S. Agneshwar, Gerald D. Dorman, Henry I. Fineberg, Louis W. Giordano, George J. Lawrence, Jr., Mrs. Torrence P. B. Payne, Edward Siegel, Victor J. Tofany, Tamarath K. Yolles, and Edward A. Wolfson.

County Executives: Coleman M. C. Fineberg, Edward Lucy, and Joseph L. Stile.

Medical Student Representatives: Charles J. Cattano, Matthew Kuhn, and Andrew W. Litt.

Staff: Irma A. Erickson and Gerald Sullivan.

Meetings: The Delegation held a business meeting on Friday, December 4, 1981, at which the reports and resolutions sent to the delegates in the advance handbook were reviewed. The written comments of the Medical Society of the State of New York Division Directors on these reports and resolutions were also considered by the Delegation. John Barrasso, Ronald M. Davis, Andrew W. Litt, and Dennis Causey, representatives of the Resident Physicians Section and the Medical Student Section addressed the Delegation at the Saturday breakfast meeting, and urged support for resolutions which would provide for designated members of these sections to attend meetings of the AMA Board of Trustees. At the Delegation's breakfast meeting on Sunday, December 6, members of the AMA Board of Trustees, Hubert A. Ritter, M.D., and James S. Todd, M.D., answered the Delegation's questions relative to certain positions of the Board. At the 7:00 a.m. breakfast meeting on Monday morning, the Delegation analyzed additional reports and resolutions which had been distributed that morning. After a consensus opinion had been reached, delegates specifically assigned to reference committees expressed the views of the New York Delegation at reference committee hearings on Monday. Reference committee reports became available at 6:00 a.m. on Tuesday morning. These reports were reviewed by the Delegation at breakfast meetings on Tuesday and Wednesday morning and New York's position on various issues was expressed when these matters were considered by the House.

The Delegation greeted visitors from other states at the Hospitality Suite on Sunday, Monday, and Tuesday evenings.

The Delegation extended a warm welcome to the President-Elect of the AMA Auxiliary, Mrs. Torrence P. B. Payne, of Newburgh, New York, and invited her to join the Delegation at breakfast and luncheon meetings.

Honoring a Retiring Member of the Delegation. The Delegation honored Ralph S. Emerson, M.D., by announcing his retirement, after serving for many years as an illustrious member of the Delegation.

Dr. Emerson was elected an alternate delegate in 1963 and became a delegate in 1966. He served on numerous reference committees, and was involved at the AMA level in the Committee on Health Care Financing, the Radio, Television, and Motion Picture Committee, and the Department of Health, Education, and Welfare — AMA Surgical Criteria Project. The Delegation commended him for his many years of dedicated service.

Resolution Subcommittee of the New York Delegation. Being cognizant of the relatively small number of resolutions from New York being introduced at the AMA House of Delegates meetings, I have long felt that the myriad concerns of New York physicians should be brought to the attention of the Federation. I, therefore, suggested that we embark on a new endeavor to increase the number of potential resolutions to be introduced by the Delegation. To that end, I appointed a subcommittee, chaired by Allison B. Landolt, M.D., to review potential resolutions. We have invited all interested parties (i.e., county medical societies, district branches, and specialty representatives) to apprise the subcommittee of areas of interest which could be developed into suitable resolutions.

Reference Committee Assignments. Members of the New York Delegation serving on reference committees were:

B. (Legislation) . . . . Edgar P. Berry, M.D.
D. (Hospital and Medical Facilities) . . . . Joseph J. Kaufman, M.D.
Convention Committee: Rules and Orders of Business . . . . Paul M. DeLuca, M.D.

Observers at reference committee hearings, designated to serve by the chairman of the delegation, were:

Constitution and Bylaws . . .. . Drs. Collins and Lanjewar
A. (Insurance and Medical Service) . . . . Drs. Emerson and Schwartz
B. (Legislation) . . . . Dr. Eberle
C. (Medical Education) . . . . Drs. Lawrence, Pisani, and Sherman
D. (Hospitals and Medical Facilities) . . . . Drs. DeLuca and Shanaphy
E. (Scientific-Public Health) . . . . Drs. Landolt and Tanenhaus
F. (Board of Trustees) . . . . Drs. Clowe and Rosenberg
G. (Miscellaneous) . . . . Drs. Aswad, Finkbeiner, and Kurtz
H. (Miscellaneous) . . . . Drs. Dorman and Tofany

ACTIONS TAKEN BY THE AMA HOUSE OF DELEGATES AT THE 1981 INTERIM MEETING ON NEW YORK RESOLUTIONS SUBMITTED AND REFERRED AT PREVIOUS MEETINGS

Confidentiality and Accreditation of Computer Data Banks (Resolution 47, I-79). The House of Delegates adopted a 31 page report on issues related to confidentiality of medical records. It evaluated general policy on access and redisclosure, patient consent and consent forms, access by patients to their records, insurance company access and redisclosure, peer review access and use, federal and state government access and use, government agency redisclosure, access through courts or law enforcement agencies, employer access and use, physicians' privacy and confidentiality, access and use for research, use and redisclosure by computer data systems, as well as federal vs. state legislation on the issue.

The resolution introduced by the New York Delegation at the Interim Meeting in 1979 called for consideration by the Joint Commission on Accreditation of Hospitals of an accreditation program for computer data banks. An AMA task force discussed this subject at length with experts in computer data management and security, and with the JCAH. The JCAH representative endorsed the desirability of some type of accreditation or certification of such data banks, but questioned the present ability of the JCAH to undertake such accreditation in terms of additional resources required and the operational priorities of the Joint Commission.

The Task Force was also advised by AMA legal counsel of potential antitrust problems which any standard setting program faces. In the opinion of counsel, these problems could be expected to intensify if the standards for computer data banks were to be established by an organization without generally acknowledged expertise in that area, such as the JCAH. The Task Force expressed the belief that accreditation or certification of computer data banks is a desirable long-term goal, but that because of potential financial and legal problems, the JCAH would not be as appropriate a source for such accreditation as would be one of the evolving professional organizations in the field of computer security. Accreditation from the latter source could legitimately attest to the security of all data handled by the computer facility, not just medical data. The Task Force further believed that discussions as to the feasibility and sources of accreditation for such data banks should be continued.

Foreign Medical Schools. Substitute Resolution 70 (I-80), Foreign Medical Schools, which was cosponsored by the New York Delegation and adopted by the House of Delegates, called for 1) a uniform method to evaluate foreign medical schools; 2) the standards used to determine adequacy of the program of a foreign medical school to be equivalent to the standards by which U.S. medical schools are evaluated; 3) the AMA to recommend that individual accrediting or licensing jurisdictions participate in a uniform evaluation mechanism, and not make independent judgments on foreign medical schools; and 4) development of a mechanism for evaluation of qualifications of graduates from newly created foreign schools.

In an effort to respond to the request of the House of Delegates for further study of possibilities for accreditation of foreign medical schools at the present time, the Council on Medical Education noted in its report (Report C) that it has appointed an ad hoc committee which is engaged in further investigations on this subject with other appropriate organizations. A final report of the findings of the ad hoc committee and recommendations of the Council on Medical Education will be available for the Annual Meeting of the House of Delegates in 1982.

IMPORTANT ACTIONS OF THE HOUSE OF DELEGATES

The House of Delegates

— endorsed a statement by six national organizations encouraging the development of health care coalitions. Signing the statement, which calls for members or affiliates to work together in voluntary coalitions on a local, state or regional basis, were the AMA, American Hospital Association, Blue Cross and Blue Shield Associations, Business Roundtable, Health Insurance Association of America, and American Federation of Labor and Congress of Industrial Organizations.

The statement urges local coalitions to analyze resources and establish projects to seek solutions to health care problems. In endorsing the statement, the House said "the AMA strongly supports health care coalitions that include meaningful physician participation, so that primary emphasis is given to quality medical care, including availability and access, as well as recognizing the importance of cost effectiveness and cost containment."

— approved the applications of six medical specialty societies for representation in the House of Delegates. The House asked the Board of Trustees, the Council on Constitution and Bylaws, and the Council on Long Range Planning and Development to prepare a new set of guidelines on specialty society representation for consideration at the 1982 Annual Meeting. The six societies seated are: American Association of Clinical Urologists, American College of Nuclear Physicians, American Orthopaedic Association, American Society of Gastrointestinal Endoscopy, American Society of Therapeutic Radiologists, and Association of Life Insurance Medical Directors of America.

— unanimously adopted tighter standards for accrediting continuing medical education (CME) programs, but withheld final approval until seeing the handbook that will be used to implement them.

— in adopting two Board reports summarizing recent developments on "pro-competition consumer choice" National Health Insurance proposals, the House of Delegates renewed AMA's strong concern that such legislation, despite offering some appealing aspects, must be monitored carefully to assure that the eventual consequences are not decidedly unappealing.

In directing the Board and the Councils on Medical Service and Legislation to continue such surveillance, the delegates defined the objective as "preserving accessibility of high-quality health care to Americans within the current systems of health care delivery," and defined the framework as working within the six principles approved at last June's Annual Meeting. Those principles include multiple choice of plans, minimum benefits, equal contributions from employer and employee, non-taxable rebates to employees, a maximum contribution limitation, and provisions to disqualify non-complying employer plans.

— adopted a set of principles for voluntary medical peer review.

In adopting a report by the AMA's Council on Medical Service, the delegates said each of the principles should be found in any organization or system that has as its objective the assessment of medical care quality.

The principles are:

1) Medical peer review is an organized effort to evaluate and analyze medical care services delivered to patients and to assure the quality and appropriateness of these services. Peer review exists to maintain and improve the quality of medical care.
2) Peer review is a local process.
3) Physicians are ultimately responsible for all peer review of medical care.
4) Physicians involved in peer review should be representatives of the medical community and participation must be structured to maximize involvement of the medical community. Any peer review process must provide for consideration of the views of individual physicians, groups of physicians, or institutions under review.
5) Peer review evaluations are based on appropriateness, medical necessity, and efficiency of services to assure quality medical care.
6) Any system of medical peer review must have established procedures.
7) Peer review of medical practice and the patterns of medical practice of individual physicians, groups of physicians, and physicians within institutions is an ongoing process of assessment and evaluation.
8) Peer review is an educational process for physicians to assure quality medical services.
9) Any peer review process must protect the confidentiality of medical information obtained and used in conducting peer review.

The AMA's Council on Medical Service also reported that it is preparing a set of suggestions for implementing these peer review principles to submit to the AMA House of Delegates at the 1982 Annual Meeting. These suggestions will identify alternative approaches and systems for peer review that are compatible with the principles adopted by the delegates at the 1981 Interim Meeting. Suggestions will be provided for initiating a peer review system, including structure and composition, scope of activity, and financing.

In another action regarding peer review, the delegates "strongly reaffirmed" medicine's continuing commitment to the development and maintenance of voluntary, professionally directed peer review of medical care, encouraging physicians to continue and expand their efforts to ensure that such care is of high quality, appropriate duration and reasonable care.

— adopted a report recommending that the AMA "inform the President and Congress of the medical consequences of nuclear war; prepare informational materials to educate physicians and the public on the medical consequences of nuclear war; and cooperate with authorities in dealing with matters having to do with health and medical care in the event of national emergencies."

— adopted Bylaws changes to allow medical students to serve as delegates from state medical societies.

— adopted Judicial Council Report A on the pros and cons of charging interest on delinquent accounts.

— advocated that the supply of physicians be determined by free-market forces rather than by a regulatory process, and pledged to provide physicians with information that would help them choose specialty and geographic areas that require their services.

— urged state licensing authorities to continue to recognize the National Board of Medical Examiners' certificate for the purposes of medical licensure, and support a single Federation Licensing Examination (FLEX) instead of the proposed FLEX I — FLEX II concept.

— disseminated a joint AMA-American Bar Association statement on interprofessional relations for physicians and attorneys.

— reaffirmed current AMA policy of supporting multiple types of education programs for nurses.

— adopted the position that the best interests of hospitalized patients are served when admission history and physical exams are performed by a physician, recognizing that portions of the histories and physical exams may be delegated by the physician to others whose credentials are accepted by the medical staff.

—recognized that varying factors in different health care delivery systems do not permit an absolute, direct cost comparison between HMOs and traditional practice settings.

— authorized the speakers to appoint a five-member advisory committee to review the format and procedures of the annual and interim meetings of the House of Delegates.

Respectfully submitted,

John L. Clowe, M.D., *Chairman*

NEW YORK DELEGATION TO THE AMERICAN MEDICAL ASSOCIATION (SUPPLEMENTARY)

To the House of Delegates, Ladies and Gentlemen:

131st ANNUAL MEETING
CHICAGO, ILLINOIS
June 13-17, 1982

At the 131st Annual Meeting of the American Medical Association, Chicago, Illinois, June 13 to 17, 1982, the New York Delegation included the following:

Delegates: Edgar P. Berry, John L. Clowe, George L. Collins, Jr., Paul M. DeLuca, G. Rehmi Denton, Richard D. Eberle, John A. Finkbeiner, Samuel M. Gelfand, Carl Goldmark, Jr., Joseph J. Kaufman, Morton Kurtz, Allison B. Landolt, Dattatraya G. Lanjewar, Richard N. Pierson Jr., Bernard J. Pisani, Milton Rosenberg, Ralph M. Schwartz, Joseph F. Shanaphy, Charles D. Sherman, Jr., and M. Theodore Tanenhaus.

Alternate Delegates: Charles N. Aswad, David M. Benford, James M. Flanagan, Robert M. George, George Lim, Daniel F. O'Keeffe, and George T. C. Way.

Specialty Society Delegates: Ray A. Elliott, Jr., George Hambrick, and Russel H. Patterson.

Also: Gerald D. Dorman, Henry I. Fineberg, Edward Siegel and Victor J. Tofany.

County Medical Society Officers and Executives: Coleman M. C. Fineberg, Louis W. Giordano, Mary Alice Hughes, Christian Hynes, Linda Lambert, Edward Lucy, Milford C. Maloney, Hazel Spadafora, Joseph L. Stile, and Richard F. Trecasse.

Medical Student Representatives: Robert Burns, Michael Chaskes, Matthew Erlich, Frederick Grant, and Jack Stroh.

Staff: Irma A. Erickson, George J. Lawrence, Jr., Robert J. O'Connor, and Gerald Sullivan.

Meetings: The Delegation held a business meeting on Friday, June 11, 1982. Material sent to the delegates prior to the meeting was reviewed, together with comments from MSSNY Division Directors on reports and resolutions. This review was continued at the 7:00 a.m. breakfast meeting on Saturday morning. At 1:00 p.m. on Saturday the Delegation joined the Great Lakes States Coalition in interviewing the candidates for the positions of President-Elect and Trustee of the American Medical Association's Board of Trustees. Additional reports and resolutions were distributed to delegates on Sunday and the Delegation reviewed these at the 7:00 a.m. breakfast meeting and formulated positions to be expressed at reference committee hearings. The Delegation was informed of the status of FTC legislation and reached a decision to send mailgrams to the New York Congressional Delegation requesting support for H.R. 3722, a bill which would affirm the important concept that, in creating the FTC, Congress never intended that the learned professions be involved under the jurisdiction of the FTC. Candidates for positions on AMA Councils were interviewed by the Coalition at 9:00 a.m.

At the 7:00 a.m. breakfast meeting on Monday, Barbara L. Nichols, President, and Judith A. Yates, Executive Director of the American Nurses' Association, addressed the Delegation, noting that the New York State Nurses' Association requested that the ANA review proposals to amend the nurse practice act in the State of New York. Since the ANA believes that the authority of nurses to provide primary health care services is legally recognized and regulated within the context of the present nurse practice act in the State of New York, ANA responded by expressing ANA's position to key senators and assemblymen. At noon on Monday the New York Delegation hosted its annual "picnic" luncheon for AMA delegates, alternate delegates and guests.

Reference committee reports became available at 7:00 a.m. on Tuesday, and the Delegation discussed positions to be taken on the various issues coming before the House. This process was repeated at the 7:00 a.m. breakfast meetings on Wednesday and Thursday. The entire Delegation attended a luncheon reception on Wednesday at noon in honor of Mrs. Torrence P. B. Payne's installation as President of the American Medical Association Auxiliary.

Reference Committee Assignments: Members of the New York Delegation serving on reference and convention committees were:

Constitution and Bylaws	Ralph M. Schwartz, M.D.
B. (Legislation)	Milton Rosenberg, M.D.
E. (Scientific-Public Health)	Charles D. Sherman, Jr., M.D., Chairman
Rules and Order of Business	Paul M. DeLuca, M.D.

The following were assigned by the Chairman of the Delegation to be observers at reference committee hearings:

Amendments to Constitution and Bylaws	Drs. Berry, Collins, and Lanjewar
A. (Insurance and Medical Service)	Drs. Denton, O'Keeffe, George, and O'Connor
B. (Legislation)	Drs. Eberle and Lim
C. (Medical Education)	Drs. Pierson, Pisani, and Lawrence
D. (Hospitals and Medical Facilities)	Drs. Deluca, Kaufman, Shanaphy, and Way
E. (Scientific — Public Health)	Drs. Landolt and Tanenhaus
F. (Board of Trustees)	Drs. Clowe and Goldmark
G. (Miscellaneous)	Drs. Aswad, Finkbeiner, Gelfand, and Kurtz
H. (Miscellaneous)	Drs. Benford, Dorman, Flanagan, and Tofany

Resolutions: The following resolution was introduced by the Delegation and was acted upon as indicated:

RESOLUTION 2 (A-82) Management of Nuclear- and Isotope-Related Injuries and Contamination

Whereas, The holocaust implicit in the event of a nuclear accident or nuclear war is of concern to all physicians; and

Whereas, In the case of a large scale nuclear-related injury physicians will be called upon to deal with disaster on a scale and of a character never before seen nor planned for; therefore be it

RESOLVED, That the American Medical Association recognize the need for the education and re-education of physicians in the medical and surgical management of nuclear- and isotope-related injuries and contamination.

AMA HOUSE OF DELEGATES ACTION: Considered in conjunction with Resolution 33, Medical Consequences of Thermonuclear Incidents. The House adopted the following substitute resolution in lieu of Resolutions 2 and 33:

RESOLVED, That the American Medical Association seek appropriate opportunities to publicize the many benefits of the medical use of radioisotopes and that such uses differ from the medical consequences of thermonuclear incidents; and be it further

RESOLVED, That the AMA consider in any implimentation of Report DD (I-81) the broad spectrum of possible thermonuclear incidents, and the corresponding medical consequences and appropriate medical responses thereto.

(Report DD of the Board of Trustees recommended that the AMA inform the President and Congress of the medical consequences of nuclear war, prepare informational materials to educate physicians and the public on the medical consequences of nuclear war, and cooperate with authorities in dealing with matters having to do with health and medical care in the event of national emergencies.)

RESPONSE TO A NEW YORK RESOLUTION SUBMITTED AT THE INTERIM MEETING IN 1980

Foreign Medical Schools: In the annual report of the Delegation it was noted that an ad hoc committee of the Council on Medical Education was studying the possibilities for accreditation of foreign medical schools, in response to Substitute Resolution 70 (I-80) which was cosponsored by the New York Delegation. Report D of the Council on Medical Education addressed the issues and was adopted by the House in amended form. It states in part:

"The Council, therefore, recommends that the AMA:

(1) Recommend that the Accreditation Council for Graduate Medical Education (ACGME) work with the ECFMG to study the feasibility of including a test of clinical skills and knowledge as a component on the certification process.

(2) Recommend that at such time as the ECFMG certificate, modified by one of the procedures detailed above is validated, then the state medical licensing authorities should accept it as evidence of an FMG having successfully completed acceptable medical education as required for licensure if evaluation of the educational programs of the particular foreign medical school is not possible.

(3) Recommend that the AMA encourage the efforts to develop a system to assist individual states in the evaluation of the educational programs of foreign medical schools.

"In summary, the Council on Medical Education believes that persons educated in foreign countries who apply for positions in accredited programs of graduate medical education should be evaluated for clinical and scientific knowledge and skills in a manner that assures their comparability to graduates of United States medical schools.

"The Council on Medical Education also believes that the goals of Substitute Resolution 70 (I-80) can be met with modifications of current procedures."

Also adopted by the House was the following resolution on the subject of licensure of foreign medical graduates:

RESOLVED, That the American Medical Association recommend that state medical licensing boards require graduation from a program of medical education leading to the medical degree that is accredited by the Liaison Committee on Medical Education as a prerequisite for an unrestricted license to practice medicine in any state and that graduates of educational programs not accredited by the Liaison Committee on Medical Education be required to provide documentation of graduation from a school meeting equivalent standards of performance evaluation requirements.

Development of a National Health Policy. In adopting Report S of the Board of Trustees, the AMA embarked on activities to develop a National Health Policy. It will be a broad-based outline of major concerns for health, including both private sector and public elements, for the foreseeable future. It will provide a conceptual and philosophical frame-work that will be consistent over a multiple-year period as the basis for specific action plans and proposals that are responsive to the particular social, economic, scientific, educational, and political circumstances that evolve from year to year. The National Health Policy will provide the opportunity for the AMA and others in the health sector to abandon the traditional year-by-year piecemeal development of health policy in response to the short-term pressures of the moment in favor of a long-term, considered approach that will stand the test of time.

The AMA will develop a steering committee and a series of work groups representing the AMA and such organizations as specialty societies, the American Hospital Association, Blue Cross-Blue Shield, the American Dental Association, the American Nurses' Association, the National Medical Association, the Health Insurance Association of America, representatives of the business community, including the Chamber of Commerce and the Business Roundtable, representatives of labor, and other organizations and groups.

The Delegation felt that the state medical societies should be involved in the developmental process and should have the opportunity to review the basic principles and the health policy plan prior to its implementation. The Delegation therefore recommended to the House that (1) quarterly reports on activities of the steering committee be forwarded to all state associations for review and input, and (2) following the distribution of the finalized document, there will be no vote for a minimum of one year, allowing each state House of Delegates to properly debate the finalized document, if they so desire, prior to final acceptance.

Due to parliamentary maneuvering, the New York Delegation was unable to bring this motion to a vote on the House floor. I, therefore, recommend that a resolution to that effect be considered by our House of Delegates and submitted to the AMA at the Interim Meeting in December, 1982.

IMPORTANT ACTIONS OF THE HOUSE OF DELEGATES

The House of Delegates —

— approved a far-reaching policy statement on medical education that was designed to counter a trend toward fragmentation of the field of medicine. The most controversial of the 36 recommendations contained in the 41-page report on "Future Directions in Medical Education" was a proposal to revive the general internship as the transitional year between the last year of medical school and the first year of residency. The report, which also deals with such topics as preparation for and admission to medical school, graduate medical education and specialty boards, licensure, continuing medical education, and graduates of foreign medical schools, was prepared by six task forces over a two-year period.

— voted to study representation of medical staffs in the AMA House. Delegates called for a committee to address the possible need for a Section on Medical Staffs and the possibility of using an existing or newly formed council or some other mechanism to handle the concerns of medical staffs. The committee will also study the effect of such a section on AMA membership. The House action called on the AMA, working with state and county medical societies, to provide "counsel and services necessary to strengthen the local hospital medical staffs."

— voted a $30 increase in regular members' dues as part of the incremental approach to dues increases recommended at the 1981 Annual Meeting. Dues for other membership categories, with the exception of medical students, also were raised. The 1983 dues structure will be: regular members, $315; physicians in their second year of practice, $236; physicians in military service, $210; physicians in their first year of practice, $158; physicians in residency training, $45; medical students, $15.

— referred a report on the AMA's policy on nurse practitioners back to the Board. The Board had recommended that the AMA (1) continue to monitor and review developments relating to nurse practitioners, and (2) maintain a neutral policy.

— voted to actively oppose enactment of H.R. 6410, the Pension Equity Act, because of its major discriminatory provisions and resolved to support equity in pension plans, including appropriate increases in maximum contributions to self-employed retirement plans (Keogh plans).

— urged organized medicine at all levels to create for itself a leadership role in peer review, and asked state medical societies to assess peer review activities within their states and provide this information to the AMA no later than December 31, 1982. The AMA asked state medical societies to embark on three types of activities: a statewide peer review assessment including discussions with other groups involved in peer review activities; development of a statewide peer review plan; and design and implementation of a complementary public information program.

— updated its stand on periodic examinations of healthy people.

— endorsed a policy on employer-sponsored examinations. The delegates said that whenever practical, the employee should be referred to his or her personal physician for such professional services. In the many instances in which an employee does not have a personal physician, efforts should be made to assist him or her in obtaining one, with emphasis on continuity of care.

— adopted a Board report outlining the AMA's efforts to amend proposed legislation so that hospital-based and hospital-associated physicians can retain their status as "independent contractors" under the Employment Tax Act of 1981.

— called for rectification, if necessary, in appropriate parts of the Veterans Administration Schedule for Rating Disabilities, a guide that affects more than 27 million veterans and that was last published in 1945.

— supported the current system of state regulation of professional liability insurance and opposed any effort by the federal government to preempt this right of the State.

— concluded that conclusive evidence of the effectiveness of second surgical opinion programs is still not available. Recent governmental and private sector activities regarding second-opinion programs were summarized in a report.

— reaffirmed its opposition to the federal government's use of advertisements and other promotional mailings designed to encourage Medicare beneficiaries enrollment in health maintenance organizations (HMOs) and vowed to continue to seek legislation that would prohibit the use of public funds to promote one form of medical care delivery over another.

— called for improved governmental processes in designating "areas of medical need" and greater input from local and state medical societies in making the designation.

— supported local voluntary health planning with physician input, implementation of health plans by the local community, and separation of the planning process and regulatory functions.

— continued to support efforts to repeal the federal Health Planning Act.

Respectfully submitted,

John L. Clowe, M.D., *Chairman*

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⇒ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

Your reference committee noted that the Delegation honored Dr. Ralph S. Emerson's retirement after serving as an alternate delegate and delegate to the AMA since 1963.

Your reference committee also notes that the New York Delegation takes cognizance of the relatively small number of resolutions from New York being introduced at the AMA House of Delegates' meetings. The reference committee is very much in accord with the Chairman's efforts to correct this by appointing a subcommittee to review potential resolutions. We find worthy of reiteration his invitation to interested parties, county medical societies, district branches, and specialty representatives to apprise the subcommittee of areas of interest which could be developed into suitable resolutions to be submitted to the House of Delegates of the AMA. This endeavor is especially important in light of the fact that the New York Delegation has the second largest number of delegates since increasing its strength from 16 to 20 members in 1982.

We are grateful for the leadership of the Delegation's new chairman, John L. Clowe, M.D.

⇒ Your reference committee recommends that the annual and supplementary reports of the New York Delegation to the AMA be filed for information.

⇒ . . . *The annual and supplementary reports of the New York Delegation to the AMA were* **FILED FOR INFORMATION** . . .

RESEARCH AND DEVELOPMENT

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Research and Development are as follows:

G. Rehmi Denton, M.D., *Chairman*	Albany
James M. Blake, M.D.	Schenectady
Lynn R. Callin, M.D.	Monroe
Richard D. Eberle, M.D.	Syracuse
Ralph S. Emerson, M.D.	Nassau
Henry I. Fineberg, M.D.	Suffolk
Carl Goldmark, Jr., M.D.	New York
Walter T. Heldmann, M.D.	Richmond
Bernard J. Pisani, M.D.	New York
Milton Rosenberg, M.D.	Suffolk
Ralph M. Schwartz, M.D.	Kings
Edward Siegel, M.D.	Clinton
George T.C. Way, M.D.	Dutchess

The Committee on Research and Development continued to function as a "think-tank" under the leadership of G. Rehmi Denton, M.D., Past-President and Chairman. The Committee, consisting of Past-Presidents, the President-Elect and the Vice-President, met for an intensive two-day session in September, 1981, for a regular meeting in February, 1982, and is planning to meet on October 1 and 2, 1982, for another two-day session.

The Department of Research and Development continues to assist other Divisions in the research and preparation of various reports and projects, and has assisted individual member physicians in Medical Society of the State of New York related endeavors.

A report on the specific projects in their various stages of development follows.

DEMOGRAPHIC SURVEY OF PHYSICIANS IN NEW YORK STATE

The Demographic Survey of Physicians in New York State (Resolution 79-16) continued to occupy priority status. It is expected to be published this summer (1982), and will yield the following data: Physicians' names, addresses, hospital appointments, age, sex, membership, nonmembership status, specialty and license number. The information is broken down geographically and physician counts are compared with population groups in specific areas to determine physician/population and primary care physician/population ratios.

As part of the Demograpic Survey, staff intends to plot practicing physicians on a map of contiguous areas of New York State to realistically determine physician shortages taking physician practice hours, geographic locations and variables, and population into account. This project is planned for the fall and winter of 1982.

MEDICINE/BUSINESS COALITION OF NEW YORK STATE

1981-1982 was a year of expansion and progression for the Medicine/Business Coalition of New York State (formerly known as the Corporate Visitation Program). Agenda items were prioritized. Among the items discussed in depth: the Medical Liability Crisis, Physician Education, and Utilization Review.

The Coalition, in addition to representing organized medicine, currently represents Chase Manhattan Bank, Citibank, Eastman Kodak Company, the Fairfield/Westchester Business Group on Health, General Electric, General Motors, International Business Machines, Metropolitan Life Insurance, the New York Business Group on Health, New York Telephone and Revlon Corporation.

The Medical Society of the State of New York's Cochairman is Ralph M. Schwartz, M.D., Past-President, and the Business Cochairman is Russell F. Schuck of IBM. The chairmen alternate presiding, and business and medicine alternate hosting the meetings.

The group meets approximately every 2 months, and has decided to draw up formal bylaws and incorporate at a future time.

The Coalition is nearing completion on a brochure entitled, "Health Care Challenge for the 80s." This effort reflects both medicine's and business' concern over rising costs, and what the individual can do to ease the problem.

The Medicine/Business Coalition of New York State will continue to address programs and projects affecting health care providers, business and the citizens of New York State in relation to delivery of health care, and access to it, while attempting to devise methods of keeping costs down while maintaining quality.

MEDICAL MALPRACTICE LEGISLATION CHART

The Medical Malpractice Legislation Chart, put together last year, continues to be in demand not only in this country, but internationally as well. The chart was updated in the spring and will be updated on a yearly basis. The chart and accompanying definitions appeared in the November, 1981, issue of the *New York State Journal of Medicine*.

LIABILITY RATES STUDY

A cross-country sampling of medical liability rates, current as of last fall, was charted at Administration's request. We have had innumerable requests nationwide for reprints of the chart and accompanying article which was printed in the September, 1981, issue of the *New York State Journal of Medicine*. The survey clearly indicated higher than average rates in New York.

NURSE PRACTITIONER CHART

In conjunction with the Division of Governmental Affairs, Research and Development charted nurse practitioner legislation across the country, and defined some of the terms used within the written laws to enable those examining nurse practitioner legislation to more fully understand it. Educational requirements, supervisory requirements, and prescription writing authority were included in the chart. In addition to requests from states and organizations, the chart and accompanying information will be printed in the *New York State Journal of Medicine*. Additionally, the magazine *Medical Economics* requested reprinting rights with credit given to the Medical Society of the State of New York.

The publishing of the Medical Malpractice Legislation Chart and the Medical Liability Rates Chart and the Nurse Practitioner Legislation Chart allowed the *New York State Journal of Medicine* the distinction of being the only Journal nationwide to have printed such cross-country, comprehensive materials. Because reprint requests were numerous, it gave the Medical Society of the State of New York and the *Journal* more visibility.

FOR-PROFIT CORPORATION REPORT

On September 10, 1981, the Council approved an undertaking of a feasibility study of a "For-Profit Corporation" between the Division of Insurance and Membership Benefits and the Department of Research and Development. A number of organizations were contacted, and the expertise of in-house division directors was sought. Based on the recommendation of the Research and Development Committee, the determination of the report was that a Medical Society of the State of New York owned "For-Profit Corporation" was premature at this time. This was primarily due to the fact that our unrelated income was at a level whereby our tax-exempt status was not threatened, and that our primary concern, at this time, would be to develop new areas of producing unrelated income in an effort to alleviate the inevitability of a dues increase. Additionally, the Research and Development Committee suggested keeping a close watch on related aspects of the possibility of a "For Profit Corporation," so that in its event, we are prepared legally, financially, and internally.

MEDICAL STAFF LEADERS

George T.C. Way, M.D., introduced a topic for consideration and study: that of the increasing importance of the role of the hospital in meeting physicians' needs. While this topic remains in the discussion stage, it will be addressed at the next Research and Development Committee meeting (October 1 and 2, 1982).

The possibility of an education program for medical staff leaders, and a Medical Society of the State of New York representative present at the Medical Staff Leaders meetings at the hospital, was discussed by the Committee.

Dr. Way spoke on this topic at the February, 1982, AMA Leadership Conference, and wrote an article which appeared in the *New York State Journal of Medicine*.

PARAPROFESSIONAL HEALTH CARE LAWS IN NEW YORK STATE

As preparation for a potential Research and Development topic, submitted by Asa P. Ruskin, M.D. (Redefining the Practice of Medicine), staff collected the Education Laws, Rules and Regulations, Commissioner's Regulations and Public Health Laws dealing with practitioners and paraprofessionals in the health care field in New York State (Physicians, Dentists, Veterinarians, Physical Therapists, Pharmacists, Podiatrists, Optometrists, Psychologists, Chiropractors, Nurses, Physicians' Assistants, Specialists' Assistants, Dental Hygienists, Physical Therapists' Assistants, Ophthalmic Dispensers, Emergency Medical Technicians and Advanced Emergency Medical Technicians, X-ray Technicians, X-ray Therapy Technicians, Chest Radiographers).

Additionally, because the material was voluminous, abstracts of each law were prepared describing exactly what that particular profession could or could not do. Although this was in preparation for future discussion of the Research and Development Committee members concerning the major topic, we have had requests for these data from various counties in New York State.

FORMATION OF A COALITION TO ADDRESS TORT REFORM

The Committee on Research and Development discussed the possibility of forming an association after the Association of California Tort Reform (ACTR) in consideration of the substitute resolution for Resolutions 81-32 and 81-51.

Milton Rosenberg, M.D. was disappointed with the lack of interest on the parts of the organizations he contacted in relation to this. It was suggested that the Medicine/Business Coalition of New York State be approached to see if they would be interested in such an effort.

The Executive Committee recommended that Dr. Siegel's request to reconsider the substitute resolution for Resolutions 81-32 and 81-51, be tabled until the mandate of the House of Delegates has been brought to the attention of the Medicine/Business Coalition. The Medicine/Business Coalition will be asked if they are interested in expanding the group to discuss matters of mutual interest in health care.

The Council, therefore, decided to table the recommendation made by Dr. Siegel to reconsider the substitute resolution for 81-32 and 81-51.

The Medicine/Business Coalition of New York State reported to the Council on March 25, 1982, that Dr. Rosenberg had presented the substitute resolution to the Coalition at its meeting on March 3, 1982. The following conclusions were reached:

> The Medicine/Business Coalition of New York State has decided, for the present time, to remain as originally planned: namely a coalition of Business and Medicine.
>
> The Medicine/Business Coalition of New York State is interested in reviewing changes in Tort Law to ameliorate the medical liability problem.

SPECIALTY SOCIETY REPRESENTATION IN THE HOUSE OF DELEGATES

The Department of Research and Development is currently investigating Speciality Society Representation in the House of Delegates to determine whether or not specialty societies were properly being represented, and, if not, how the situation might be rectified. The Council approved an in-depth study in November. Most of the necessary information has been researched and collected. Once charted and analyzed, it will be presented to the Council with appropriate recommendations.

NONMEMBER SURVEY

The feasibility of a nonmember survey was discussed. Milton Rosenberg, M.D., recommended that the best course of action to take at this time would be to investigate a professional organization that handles membership recruitment, and let a consultant advise us as to what specific direction to take. Staff was directed to contact the AMA to see if they had ever made a search of such organizations.

Respectfully submitted,

C. Rehmi Denton, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

Your reference committee is pleased to note that the Demographic Survey is completed. It represents the most accurate information on physician distribution in New York State that is currently available.

Your reference committee appreciates the time and efforts of this committee and is grateful to have the benefit of the experience and wisdom of our past-presidents as well as the present officers in the all-important task of planning.

⟹ Your reference committee recommends that the report of the Committee on Research and Development be filed for information.

⟹ . . . *The report of the Committee on Research and Development was* **FILED FOR INFORMATION** . . .

DISTRICT BRANCHES

FIRST DISTRICT BRANCH

To the House of Delegates, Ladies and Gentlemen:

Meetings of the Executive Committee of the First District Branch were held on November 10, 1981, January 12, 1982, March 9, 1982, May 11, 1982, and a meeting has been scheduled for September 14, 1982. The first order of business was an effort to clarify the true identity of the First District Branch, and, after discussion, it was suggested that the sub-title of the First District Branch be "The Federation of County Medical Societies of New York City." The Executive Committee continues to reiterate the position of past presidents of the First District Branch in its effort to emphasize the important role of this segment of the State Medical Society in the affairs relating to health delivery systems in New York City. The First District Branch, representing practicing physicians in the five counties of New York City, deserves to be included in policy-making decisions relating to health care delivery in New York City, since, in truth, this organization is composed of the practicing physicians delivering this care. We feel very strongly that medicine should not be excluded from the deliberations and planning forums, and we indeed intend to be assertive in our right to be part of these deliberations and planning forums.

HIGHLIGHTS OF ACTIONS TAKEN BY THE EXECUTIVE COMMITTEE

The Executive Committee:

- Agreed to seek to become the formal recognized medical advisory group to the Mayor's Office, and adopted the following resolution:

  > That the First District Branch, representing 12,000 physicians in the City of New York, stands ready to give its advice and assistance to the Mayor, if he should require or desire, on any issue of medical importance.

- Unanimously agreed to send a letter of protest to the Commissioner of Health of the City of New York objecting to the New York City Board of Health scale of fees for radiation inspection of x-ray equipment in physicians' offices. These fees charged are excessive and discriminatory and such fees would only add to the cost of x-ray examinations.

- Recommended that, in view of the significant increase in medical liability premiums, the First District Branch communicated with the insurance carriers, asking that the carriers reconsider their profiles of prevailing fees to more appropriately adjust to the situation.

- Expressed to Mrs. Maureen Gould, MPH, MSUP, profound thanks and appreciation for her important contribution as Consultant to the Health Systems Agency in her position as Health Planning Consultant.

- Supported the position that federal Medicaid funds should be made available for pregnancy interruption, thereby giving the indigent a choice and equal access to standard medical care of interruption of unwanted pregnancy.

— Continues to have concern about the little known provision of the Omnibus Reconciliation Act of 1981. This Act allows state governments to establish pilot projects to determine whether mandatory enrollment in an HMO could reduce costs in a state Medicaid program. Beneficiaries, through a waiver of freedom of choice of physician, may also be restricted to a single provider of primary care services if they do not have one. The First District Branch has continued correspondence with the offices of the President of Health and Hospitals Corporation, and this correspondence is in an active file.

— Supports the position to oppose mandatory assessment of hospital staff by hospital boards of trustees as the basis for continued hospital privileges. This action supports the opinion of the Judicial Council of the A.M.A. and the Joint Commission on Accreditation of Hospitals, which prohibits such assessments.

— Supported the objection of the relocation of the Workers' Compensation Board from the World Trade Center in Manhattan to another less accessible location in an outlying borough. The Committee felt that the Workers' Compensation Board should be centrally located in the Borough of Manhattan, contiguous to all central transportation.

— Supported the suggestion that a committee to coordinate efforts of the five county medical societies relating to disaster planning become an integral part of the First District Branch structure.

— Noting that fewer than 10% of physicians in the First District Branch participate actively in the PAC movement, unanimously supported an active enrollment program to increase the number of participating First District Branch members.

— Noted that Chancellor Frank J. Macchiarola, of the Board of Education, had requested financial support of his program to institute courses in life support procedures (CPR and Heimlich measures) in New York City high schools.

Although members of the Committee felt Chancellor Macchiarola's efforts laudable, and the Executive Committee supported it in principle, it was felt that greater explicit information regarding the costs involved should be attained before taking definitive action.

The Executive Committee of the First District Branch should like to express its thanks and gratitude for the cooperation extended to it by the executive directors of the five county medical societies. Their assistance has been invaluable and their contributions to the workings of the First District Branch have continued to play a significant role. Thanks are also extended to Ms. Ruth G. Altman and Ms. Donna I. Cifichiello, Recording Secretaries for the First District Branch.

Respectfully submitted,
Richard B. Nolan, M.D., *President*

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the First District Branch be filed for information.

⟹ . . . *The report of the First District Branch was* **FILED FOR INFORMATION** . . .

SECOND DISTRICT BRANCH

To the House of Delegates, Ladies and Gentlemen:

The Second District Branch did not hold a meeting during the past year. However, officers of the Nassau and Suffolk county medical societies did hold a meeting at which time the future of the District Branch was discussed. It was agreed that the two county societies work well together without the need of a separate third structure. However, it was also agreed that there is a role for the District Branch particularly in the area of Continuing Medical Education and Political Action.

It was noted that very little appears to have resulted from the Standing Committee on District Branches which had been formed and originally chaired by Doctor Eberle. If the district branches are to ever become meaningful entities, truly serving the entire membership, major changes in their structure and operation have to be made. Merely increasing the amount of reimbursable expenses they are allowed, as the House of Delegates did recently, is not going to really change anything.

It was further noted that the demographic study, which was authorized by the House of Delegates as a result of a Second District Branch resolution, has still not been done.

It is very disappointing to see how long a mandate of the House of Delegates takes to complete. It is our hope that this study will be available in the very near future.

Respectfully submitted,
Noel H. Miller, M.D., *President*

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman*

⟹ Your reference committee recommends that the report of the Second District Branch be filed for information.

⟹ . . . *The report of the Second District Branch was* **FILED FOR INFORMATION** . . .

THIRD AND FOURTH DISTRICT BRANCHES

To the House of Delegates, Ladies and Gentlemen:

The Third and Fourth District Branch delegates met daily during the Annual Meeting of the Medical Society of the State of New York House of Delegates, October 11–14, 1981. Issues important to their respective counties were discussed and both groups acted as one unit to bring about the successful representation of the District Branches.

This was the last meeting of the Third and Fourth District Branches to date.

A combined annual meeting is scheduled for October 28–31, 1982, at the Queen Elizabeth Hotel, Montreal, Canada.

A schedule of scientific meetings is planned along with the annual elections of both district branches.

Respectfully submitted,

Nicholas P. Teresi, M.D., *President*
Third District Branch

Michael J. Lynch, M.D., *President*
Fourth District Branch

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Third and Fourth District Branches be filed for information.

⟹ . . . *The report of the Third and Fourth District Branches was* **FILED FOR INFORMATION** . . .

FIFTH DISTRICT BRANCH

To the House of Delegates, Ladies and Gentlemen:

The Fifth District Branch of the Medical Society of the State of New York collected funds from its component county medical societies in the amount of $1.00 per active member, $.25 of which is allocated to the American Medical Student Association fund.

In the past year, money was allocated to help defray expenses of Upstate Medical Center students to the annual meeting of the American Medical Association in June and to the American Medical Student Association annual convention held in San Diego from March 31 thru April 5, 1982.

On May 13, the Fifth District Branch, in conjunction with the Medical Liability Mutual Insurance Company and the Scientific Activities Division of the Medical Society of the State of New York, sponsored a seminar on Patient Safety for physicians in the Fifth District Branch.

The morning seminar was followed by a noon luncheon, which was opened up to area civic and business leaders to hear a program entitled "Professional Liability Insurance for Physicians—A People Problem Crying for a Solution."

Approximately 50 physicians attended the morning program, and 100 persons were on hand for the luncheon program.

Respectfully submitted,

Carl E. Marlow, M.D., *President*

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Fifth District Branch be filed for information.

⟹ . . . *The report of the Fifth District Branch was* **FILED FOR INFORMATION** . . .

SIXTH DISTRICT BRANCH

To the House of Delegates, Ladies and Gentlemen:

The Sixth District Branch of the Medical Society of the State of New York encompasses the counties of Broome, Delaware, Otsego, Tioga, Chemung, Schuyler, Tompkins, and Cortland. Current membership stands at 715. Officers of the Sixth District Branch are as follows:

President	Herbert J. Wilk, M.D.	Broome
Vice President	Thomas Lavell, M.D.	Delaware
Secretary	Rodman Carter, M.D.	Otsego
Delegate	Vincent Maddi, M.D.	Broome

The Treasurer of the Sixth District Branch, Dr. John Scott, recently resigned to take a position in another county outside of the District. The new treasurer is in the process of being named at the time of this writing.

The District has sought input from all of its constituent bodies on a number of issues including Health Maintenance Organization (HMO) development, shared computer billing services, Medicaid fees and the Medicaid Management Information System (MMIS), and other related matters.

Over the past year, the District participated in an educational conference in cooperation with the Seventh and Eighth Districts. Category 1 CME credit was available for the participants and was awarded.

The annual caucus of the Fifth and Sixth Districts is scheduled for late in September and at that time resolutions from consitutent medical societies will be considered for support by the District.

The District and its officers have been active in meetings with Assemblyman Tallon and Senator Anderson over the issue of tort reform in the medical liability arena. Our legislators have been receptive to the overtures of the District but, nonetheless, have decided not to be as supportive as we would have liked. In any event, District legislators are hearing our concerns and are cognizant of the political force which the District represents.

Additionally, District representatives have met with members of local departments of social services over the Medicaid fees and treatment inasmuch as the Medicaid Fee Schedule is creating a situation wherein patients cannot be seen by physicians. This is especially true in the area of obstetrics. The communities within our District do not have obstetrical residencies and as such the Medicaid population must depend upon the private practitioner for obstetrical care. Given the liability climate and the low level of payment ($225 for a normal delivery) physicians within our District have refused to see Medicaid patients unless some form of resolution is reached. This is an ongoing problem within the District and officers and individual physicians are making their thoughts known to those within administration who have the power to affect changes.

In cooperation with the Broome County Medical Society, the District was active in formulating a resolution relative to the *New York State Journal of Medicine*, which has exhibited an overwhelming deficit (almost one-half million dollars per year) in its operating budget. The resolution is a true expression of the feelings of the physicians in our part of the State and is gaining support from other medical societies within the upstate region.

The activity of the past year has required that the dues of the District be raised from $2 per member to $5 per member. The dues increase was approved and it is expected that the additional money will cover the cost of operating the District.

Charles N. Aswad, M.D., has served two consecutive terms as Sixth District Councilor. Consequently, the District is nominating and supporting Antonio LaSorte, M.D., to fill the position of Sixth District Councilor. Additionally, the District is nominating and supporting Dr. Charles N. Aswad for the position of Vice-Speaker of the Medical Society of the State of New York. At this time, I would like to thank Dr. Aswad for his years of dedicated and outstanding service as Sixth District Councilor. My sincere thanks also go to the District Branch officers and all the county medical societies who have worked together to resolve matters of mutual interest to physicians on the southern tier of New York State.

Respectfully submitted,

Herbert J. Wilk, M.D., *President*

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Sixth District Branch be filed for information.

⟹ . . . *The report of the Sixth District Branch was* **FILED FOR INFORMATION . . .**

SEVENTH DISTRICT BRANCH

To the House of Delegates, Ladies and Gentlemen:

New officers for the Seventh District Branch were elected in September, 1981. They are as follows:

President	John E. Horn, M.D.
First Vice President	Verne M. Marshall, M.D.
Second Vice President	Norman R. Loomis, M.D.
Secretary	Charles R. Salamone, M.D.
Treasurer	Timothy J. Ryan, M.D.
Delegate	Sheppard Arluck, M.D.
Executive Secretary	Thomas E. Cardillo, M.D.

The medical liability insurance crisis took up a good deal of the attention of the Advisory Council during the past year. As early as our May, 1981, meeting it was feared that the Superintendent of Insurance, Albert Lewis, would again reject the 70% plus rate increase that the Medical Liability Mutual Insurance Company (MLMIC) was seeking. It was thought that if MLMIC had not been overestimating its needs, this might force the company out of business. Physicians were encouraged to contact their legislators and the Governor to urge passage of the Collateral Sources Bill, the Structured Awards Bill and the Limitation of Pain and Suffering Bill, or a fourth bill that would freeze premiums and create a Catastrophic Fund to take care of higher awards. Contributors to the "super fund" would most likely be those in the specialty sections that produce higher awards.

The liability insurance crisis was also the major concern of Dr. Edward Siegel, MSSNY Executive Vice-President, when he attended our September, 1981, meeting. Dr. Siegel also stressed the importance of keeping up the pressure on elected officials. He added that MSSNY would aid the districts with a low-key public relations effort to gain understanding and support through distribution of pamphlets in doctors' offices.

Dr. John Horn reported at our June, 1982, meeting that the Governor's Catastrophic Fund Bill, which we had supported, was dead. Blue Cross/Blue Shield had mounted a very strong campaign against the Bill, but John Clancy, President of Blue Shield of Western New York, insisted, in a letter to the District, that BC/BS was sympathetic to the malpractice crisis.

Dr. Robert Peartree, President of the Monroe County Medical Society, and Dr. Thomas Cardillo, its Executive Director, reported on a series of meetings they had with BC/BS, the Chamber of Commerce, the Industrial Management Council and senior citizens. They said they would seek a signed statement from BC/BS to actively support tort reform and secure a pass through — a portion of BC/BS fee increases to be designated as a malpractice component — for 1982 and each successive year.

The Advisory Council asked Drs. Horn, Peartree and Cardillo to develop ongoing strategies for dealing with the malpractice crisis. The doctors held additional meetings with each of the above-mentioned groups, and received their support for tort reform, as well as an agreement on a "pass through" from Blue Shield.

Dr. Sheppard Arluck used the May, 1981, meeting to reaffirm the District's commitment to CME for its members. He noted that continual changes in the practice of medicine require physicians to keep their skills up-to-date.

The District topped off last year's CME program with its annual convention aboard the cruise ship Tropicale. Ports of call were Ocho Rios, Georgetown, Grand Caman and Cozumel. The cruise proved very successful, and was enjoyed by all physicians and spouses who attended. Members of the Fifth, Sixth, and Eighth District Branches were also aboard. Forty-two Category 1 credits were available on the cruise. A similar outing is planned next year, March 4–12, in Barbados.

The University of Rochester appointed an Associate Dean for Medical Education on the postgraduate level. The new Associate Dean, William J. Hall, M.D., attended our May, 1981, meeting. He emphasized his need to work closely with the District and county societies. He said the University is trying to extend programs beyond its walls and into the community. He is exploring such options as videotapes and cable TV to make programs available to physicians on an individual, at-home basis. As of June, 23 videotapes have been made available to members of the Rochester Academy of Medicine as a cooperative venture of the Seventh District, the Monroe County Society, RAM and the University.

As for the balance of the CME program, several seminars were held this past year. They included: Current Management of Gastrointestinal Disorders, April 11, 1981; Geigy Seminar on Hypertension, April 3, 1982; and an Opthalmology Seminar, June 19, 1982. The Rheumatology Seminar originally set for November, 1982, has been rescheduled for April, 1983. Attendance at each session averages well over 100 physicians.

At the request of the State Department of Mental Retardation, the Seventh District Branch has set up a committee to work with the medical staff at the Craig Development Center to review and improve care for clients at the Center. Dr. Arluck endorsed the commitee as a means of peer review, more appropriate than oversight by lay people or the media.

Also on the subject of peer review, the District agreed to ask MSSNY to fill the void in the event of the probable dissolution of PSROs. The State Society was urged to establish an administrative mechanism to coordinate any such review activities in the districts.

When the Council met in June, 1982, members were told that the Nurse Practitioner Bill was in the House Ways and Means Committee. Dr. Cardillo contacted 17 legislators, both by phone and letter, who represent the District area and reiterated MSSNY's opposition to the current language of the Bill. The Council agreed to take a positive stand in line with the position of the American Academy of Family Practitioners (AAFP) that the nurse practitioners should function only under the direction of a licensed physician.

Finally, in conjunction with MSSNY's efforts to enlarge the concept of the District Branches, the Advisory Council will set up a Long Range Planning Committee to determine how the Seventh District can best fill the needs of its members as only the District can.

Respectfully submitted,

John E. Horn, M.D., *President*

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⇒ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

⇒ Your reference committee recommends that the report of the Seventh District Branch be filed for information.

⇒ . . . *The report of the Seventh District Branch was* **FILED FOR INFORMATION** . . .

Eighth District Branch

To the House of Delegates, Ladies and Gentlemen:

There have been two meetings of the Eighth District Branch during the past eleven months, in addition to the annual combined convention of the Eighth and Seventh District Branches.

At the Annual Meeting of the Eighth District Branch on September 24, 1981, held in Buffalo, New York, the slate of officers presented by the Nominating Committee was elected unanimously for a two-year term of office. The slate is as follows:

Carmelo S. Armenia, M.D.	President	Erie
Harvey J. Blanchet, Jr., M.D.	President-Elect	Orleans
Frederick R. Downs, M.D.	Secretary	Wyoming
William T. Ellis, M.D.	Treasurer	Chautauqua
George E. Taylor, M.D.	Delegate	Allegany

Members of the Advisory Council met on February 23, 1982, in the City of Buffalo. The Council voted to endorse James H. Cosgriff, Jr., M.D., of Buffalo for the position of Councilor to the Medical Society of the State of New York, to replace Kenneth H. Eckhert, M.D. In addition, William C. Stein, M.D., of Niagara, was unanimously endorsed to be a candidate for delegate to the American Medical Association, and George E. Taylor, M.D., of Allegany, was unanimously selected to be the endorsed candidate for the position of Assistant Secretary to MSSNY.

The Advisory Council reviewed a report indicating the amount of funds raised for Political Action Committee activity in this area; and also approved several "preferred purchase programs — for members only" proposals as a tangible benefit of county and branch society memberships.

The Advisory Council discussed the various proposals and activities to ameliorate the medical malpractice crisis in New York State and urged its members to discuss the legislative program with their local state legislators and urge passage of the proposals contained therein. Dr. Eckhert, the Councilor to the MSSNY from the Eighth District Branch area, outlined the scheduled meeting dates for the MSSNY House of Delegates for 1983 through 1985.

Final plans were reviewed concerning the forthcoming Annual Convention of the Seventh & Eighth District Branches to be held aboard the cruise ship Tropicale from March 6–13, 1982. Forty CME Category 1 credit hours were offered on a variety of topics of current medical interest. In response to a recommendation of the MSSNY Council, a newsletter alert was dispatched to all members of the District Branch, describing proposed legislation by Congressman Rangel (D-New York), which would make changes of an adverse nature in the rules governing retirement pensions of self-employed individuals and corporate employees.

The 1983 Annual Convention of the two district branches is scheduled for Barbados from March 4–12, 1983.

Respectfully submitted,

Carmelo S. Armenia, M.D., *President*

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⇒ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Eighth District Branch be filed for information.

⟹ . . . *The report of the Eighth District Branch was* **FILED FOR INFORMATION** . . .

NINTH DISTRICT BRANCH

To the House of Delegates, Ladies and Gentlemen:

The officers of the Ninth District Branch are as follows:

President	Joel E. Mandel, M.D.	Rockland
First Vice-President	Francis J. McMahon, M.D.	Dutchess
Second Vice-President	Stanley L. Grossman, M.D.	Orange
Secretary	John A. Ramsdell, M.D.	Westchester
Treasurer	Zane A. Miranda, M.D.	Putnam
Executive Director	Joseph L. Stile	

Since the last Annual Meeting of the District Branch, the District has initiated an Annual Continuing Medical Education (CME) Program. The first CME program took place in Bermuda, April, 1982, at which 30 physicians and their spouses were in attendance.

The District has been cooperating and a cordial relationship exists among the several county societies.

Before the first year of Dr. Simmons' presidency expired, we regretably had to accept his resignation. Thus, I assumed the duties of the President for the remainder of his term.

The District has and hopes to continue to be active in several areas of mutual concern.

Respectfully submitted,

Joel E. Mandel, M.D., *President*

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Ninth District Branch be filed for information.

⟹ . . . *The report of the Ninth District Branch was* **FILED FOR INFORMATION** . . .

PHYSICIANS' HOME

To the House of Delegates, Ladies and Gentlemen:

In accordance with a custom established many years ago, the Physicians' Home is pleased to submit its annual report to the House of Delegates of the Medical Society of the State of New York.

As many of you are aware, the Physicians' Home is a legal entity, founded in 1919, completely independent of the MSSNY. However, it does provide beneficial aid to needy members of the MSSNY, their wives, widows and dependent children. It is not a physical plant, but instead strives to maintain these physicians and their dependents in the familiar surroundings of their own homes by providing them with the money to permit them to maintain a decent standard of living. The amount of aid varies with each case and is disbursed according to each one's need after prompt and discreet investigation. Beneficial aid is dispensed in the form of a monthly check as long as the need exists. Needs are reviewed on a regular basis and increased or, rarely, decreased as the circumstances demand. Increases are also given annually in line with the general increase in the cost of living. For example, in December, 1981, an increase of 15% was given to all recipients.

Currently the number of beneficiaries is 82, receiving aid varying from $250 to $750 per month, making the monthly disbursements about $22,000. For the nine-month period from October 1, 1981, through June 30, 1982, a total of $194,000 has already been disbursed.

The generous support of the individual members of the MSSNY, the various county medical societies, the auxiliaries and a few special gifts provided $115,000 for the fiscal year ending September 30, 1981. The balance needed to support our beneficiaries and to pay the administrative expenses was provided by dividends and interest from investments.

Administrative expenses continue to be kept to a minimum with only one full-time employee who manages the office. All other expenses such as social service, accounting and legal are paid on a fee for service basis. Officers, directors and trustees receive no reimbursement for services or expenses. Investments are managed by Manufacturers Hanover Trust, and the books are audited annually by Price Waterhouse.

The Physicians' Home is grateful to all those who continue to support its efforts to help our needy colleagues, and would greatly appreciate your reporting any additional physicians or their families who require assistance.

We wish to thank the House of Delegates for this opportunity to "render an accounting of our stewardship."

Respectfully submitted,
Executive Committee
Physicians' Home

D. Jeanne Richardson, M.D., *President*

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Physicians' Home be filed for information.

⟹ . . . *The report of the Physicians' Home was* **FILED FOR INFORMATION** . . .

RÉSUMÉ OF INSTRUCTIONS FROM THE 1981 HOUSE OF DELEGATES AND ACTIONS THEREON BY THE COUNCIL, BOARD OF TRUSTEES, EXECUTIVE COMMITTEE, OFFICERS, COUNCIL COMMITTEES, AND GOVERNMENTAL AGENCIES

*To the House of Delegates, Ladies and Gentlemen:**

Abortion. The House reaffirmed the MSSNY position paper on abortion, as published on pages 688-689 of the Special March, 1981, issue of the *New York State Journal of Medicine*, in lieu of Resolution 81-15, "*Legalized Abortion*" (page 557). Resolution 81-15 requested that, in the interest of safeguarding the health of the people of New York State, the Medical Society of the State of New York oppose legislation which will place in jeopardy the current legal status of abortion.

Alcoholism. (See Driving While Intoxicated)

AMA — Report on Actions of the New York Delegation. At the Annual Meeting of the AMA House of Delegates, the New York Delegation introduced amended Resolution 81-31, "*Management of Nuclear — and Isotope-Related Injuries and Contamination*" (pages 597-598).

> The AMA adopted the following substitute resolution:
>
> **Resolved,** That the American Medical Association seek appropriate opportunities to publicize the many benefits of the medical use of radioisotopes and that such uses differ from the medical consequences of thermonuclear incidents; and be it further
>
> **Resolved,** That the AMA consider in any implementation of Report DD (1-81) the broad spectrum of possible thermonuclear incidents, and the corresponding medical consequences and appropriate medical responses thereto.
>
> (Report DD of the Board of Trustees recommended that the AMA inform the President and Congress of the medical consequences of nuclear war, prepare informational materials to educate physicians and the public on the medical consequences of nuclear war, and cooperate with authorities in dealing with matters having to do with health and medical care in the event of national emergencies.)

Action taken by the AMA House of Delegates on the resolution introduced by the New York Delegation is included in the supplementary report of the New York Delegation to the AMA.

Board for Professional Medical Conduct. The House referred Resolution 81-6, "*Curtailment of Subpoena Powers of the Board for Professional Medical Conduct*" (page 557), to the Council. Resolution 81-6 requests that the Medical Society of the State of New York seek to amend subdivision (10) of Section 230 of the Public Health Law so that the Board for Professional Medical Conduct will be specifically prohibited from subpoenaing a physician or his medical records concerning psychiatric treatment rendered to another physician, when the patient-physician is the subject of an inquiry or investigation by the Board, and when such patient-physician voluntarily sought the psychiatric care, unless the patient-physician expressly waives the physician-patient privilege.

At its meeting on November 12, 1981, the Council referred Resolution 81-6 to the Committee on Mental Health for evaluation and report back to the Council.

In its report to the Council on March 25, 1982, the Committee on Mental Health noted that a physician may be subpoenaed to appear by virtue of Subdivision 10, Section 230, Paragraph K of the Public Health Law. Civil Practice Law and Rules (CPLR) Section 4504 protects the privilege of the physician-patient relationship and supersedes Public Health Law, Section 230. Therefore, the physician's attorney may file an order to quash the subpoena, citing CPLR Section 4504. Based on that information, the Committee felt even more strongly that all physicians must be informed of their legal rights regarding the issuance of a subpoena. The Committee emphasized that protecting and preserving the confidentiality of the physician-patient relationship is of the utmost importance to the public, as well as to physicians as patients and professionals. The Council approved the Committee's recommendation that Resolution 81-6 be adopted as amended by the addition of the following resolved:

> **Resolved,** That it is the position of the MSSNY that the confidential relationship between a physician and his patient should remain inviolate.

On April 7, 1982, the amended resolution was referred to the Chairman of the Committee on State Legislation. The committee was asked to seek amendment to subdivision (10) of Section 230 of the Public Health Law.

The Committee on State Legislation notes in its annual report that the resolution was transmitted to the Assembly Higher Education and Health Committees for their consideration. Early in the Session, the Governor's proposal on malpractice was circulated. This proposal included several amendments to the discipline process which were found to be acceptable to the State Medical Society, provided that the entire package, including the catastrophic fund provisions, were considered and approved as a unitary package. During the last few days of the Session, when it appeared that the Governor's package would not be considered by the Legislature, efforts were made by the Assembly to extract many of the discipline portions of the Governor's bill and include them in a separate bill on discipline. On behalf of the State Medical Society, our Albany representatives opposed this effort, but indicated that if the above recommendation on subpoena powers was included in the proposed discipline bill, the Society might reconsider its opposition. Due to the lateness of the Session and the opposition of the Medical Society, the Assembly dropped its effort to amend the discipline process.

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* Pages referred to are from the Minutes of the 1981 Annual Meeting of the House of Delegates, as published in the *New York State Journal of Medicine* for March 1982, vol. 82, no. 4, pages 437-680.

BYLAWS
AMENDMENTS ADOPTED

Reduced Dues for Young Physicians Entering Practice* The House adopted a substitute resolution for Resolution 80-1, "*Reduced Dues for Young Physicians Entering Practice*" (page 457), thereby amending Article XV, paragraph 3 of the Bylaws to read as follows:

> "The dues and assessments of those active members who have been graduated from medical or osteopathic college not more than five calendar years, not counting active service in the armed forces of the United States or in the United States Public Health Service, shall be one-third the amount levied on all other active members. The dues and assessments of those active members who have not completed their continuous residency training shall be one tenth the amount levied on all other active members. In no case may an active physician continue to pay such reduced dues more than seven years after the date of graduation from medical or osteopathic school. The dues and assessments of those active members entering solo practice for the first time, who are not otherwise eligible for reduced dues as set forth in prior provisions in this paragraph, shall be one half the amount levied on all other active members, for the first two years of solo practice; full dues shall be paid after the first two years of solo practice. Once an active member pays full dues, he shall no longer qualify for half dues status."

On November 4, 1981, Presidents, Secretaries, and Executive Directors/Secretaries of component county medical societies were informed of the action of the House and were requested to disseminate this information to their membership. In addition, the provisions of the resolution were reported in the *News of New York* on November 15, 1981.

On January 19, 1982, a letter was sent to approximately 18,000 potential members informing them of the reduced dues provisions for first and second year solo practitioners, and inviting them to join the Society.

Dues-Paid Deadlines* The House amended and adopted as amended Resolution 80-11, which dealt with Bylaws amendments re *Dues-Paid Deadlines* (page 458), thereby amending the Bylaws to read as follows:

ARTICLE XV, PARAGRAPH 6

> "Any member, except a member who is eligible for and has applied for life membership, whose component county medical society and State Society dues are unpaid after April 1 of any current year or whose assessments are unpaid by the specified time is not in good standing and shall be deemed to be in arrears."

ARTICLE XV, PARAGRAPH 7

> "A member whose dues are unpaid after May 1 of any current year or whose assessments are unpaid one month after the specified date shall be dropped from the roles of membership of his component county medical society and the Medical Society of the State of New York upon reasonable notice to such member by his component county medical society or the State Society, and without further action on the part of either the component county medical society or the State Society, and on such date he shall automatically cease to be a member of the component county medical society and the State Society. In the case of nonpayment of dues, the reasonable notice to be provided shall commence on April 1, or as soon as possible thereafter, upon the determination that such member is in arrears."

ARTICLE II, SECTION 2, PARAGRAPHS 10 AND 12

> "Any member, except a member who is eligible and has applied for life membership, whose component county medical society and Medical Society of the State of New York dues are unpaid after April 1 of any current year or whose assessments are unpaid by the specified time is not in good standing and shall be deemed to be in arrears."

> "A member whose dues are unpaid after May 1 or whose assessments are unpaid one month after the specified date shall be dropped from the rolls of membership of his component county medical society and the Medical Society of the State of New York upon reasonable notice to such member by his component county medical society or the State Society, and without further action on the part of either the component county medical society or the State Society; and on such date he shall automatically cease to be a member of both the component county medical society and the State Society. In the case of nonpayment of dues, the reasonable notice to be provided shall commence on April 1, or as soon as possible thereafter, upon the determination that such member is in arrears."

ARTICLE XVIII, SECTION 3, PARAGRAPH 3

> "The treasurer of each component county medical society shall forward to the treasurer of the Medical Society of the State of New York the amount of the State Society per capita dues and/or assessments and the amount of all American Medical Association dues collected from members of his component county medical society as promptly as possible, but in any event before the first day of April of each year."

Presidents, Secretaries, and Executive Directors/Secretaries of component county medical societies were informed of the action of the House and were requested to disseminate this information to their membership.

On December 1, 1981, it was noted in the *News of New York* that the House has adopted Resolution 80-11, advancing by one month the date by which MSSNY and component county dues must be received, and that members, except those who are eligible and have applied for life membership, shall not be in good standing and shall be deemed to be in arrears if their dues are unpaid after April 1. If the dues are unpaid by May 1, the member shall be dropped from the rolls of his/her county medical society and of MSSNY. It was also noted that the resolution calls upon the treasurer of each component county society to forward the amount of MSSNY per capita dues and assessments to MSSNY before April 1 of each year, instead of May 1.

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* These Amendments were Incorporated in the 1981 Revised Bylaws and Published in the January, 1982, Issue of the *New York State Journal of Medicine* (pages 107-126).

Distribution of Expense Money to District Branches* The House considered an amended resolution for Resolution 80-14, "*Distribution of Expense Money by the Medical Society of the State of New York to Each District Branch*" (page 460), which called on the MSSNY to amend Article XVI, paragraph 6 of the Bylaws to state that:

> Each district branch shall be entitled to receive a sum in accordance with the number of members in the district branch. The maximum allowable amount shall be $1,000 to district branches of less than 1,000 members; $2,000 to district branches of more than 999 but less than 2,000 members; $3,000 to district branches of more than 1,999 but less than 4,000 members; $5,000 to district branches of more than 3,999 members, exclusive of the work done by the Medical Society of the State of New York regarding notices, programs, and so on, to defray the expenses of such district branch, provided a proper statement of such expenses shall have been presented to the secretary.

The amended resolution for Resolution 80-14 was adopted by the House and referred to the Board of Trustees. The Board approved the fiscal note on Resolution 80-14 at its meeting on November 11, 1981. At its meeting on December 16, 1981, the Board of Trustees questioned the validity of certain expenses incurred by the District Branches and referred to the Board of Trustees for reimbursement. Administration informed Presidents, Executive Secretaries/Directors or Secretaries/Treasurers of District Branches that the Bylaws call for a proper statement of such expenses to be presented to the Secretary of the Society.

Committee on Prize Essays* The House adopted Resolution 80-20, "*Deletion of Article XI, Section 4, Committee on Prize Essays*" (page 461), which requested that the Committee on Prize Essays be abolished, that its function be transferred to the Council Committee on Awards and Prize Essays, and that Article XI, Section 4, of the Bylaws of the Medical Society of the State of New York be deleted. When the revised Bylaws were published in the January, 1982, issue of the *New York State Journal of Medicine*, this section was deleted.

Privileges of Student Members* Resolution 80-30, "*Privileges of Student Members*" (page 462), was amended by the House Committee on Bylaws and adopted as amended by the House, thereby amending Article II, Section 2, paragraph 4 of the Bylaws to state that student members shall be entitled to receive the *News of New York*. Each student member shall only be entitled to receive the *New York State Journal of Medicine* upon his individual written request, on an annual basis. Student members shall not be entitled to receive the Medical Directory of New York State free of charge.

On November 4, 1981, Charles Cattano, Chairperson of the Medical Student Membership, was requested to inform the Medical Student Membership of this Bylaws change affecting student members.

Resident Membership* The House of Delegates considered a substitute resolution submitted by the House Committee on Bylaws for Resolution 80-31, "*Resident Membership in the Component County Medical Societies and the Medical Society of the State of New York*" (page 462). The House amended the substitute resolution and adopted it as amended, thereby amending the Bylaws to read as follows:

ARTICLE II, SECTION 1, PARAGRAPH 1

> "The membership in the Medical Society of the State of New York shall be divided into five classes: (a) active, (b) life, (c) honorary, (d) resident, and (e) student."

ARTICLE XVIII, SECTION 2 — AMENDED BY THE ADDITION OF PARAGRAPHS 5 AND 6

> "Every component county medical society shall provide for membership for graduates of recognized medical or osteopathic schools who are in continuous residency training. The constitution and/or bylaws of the component county medical society shall provide that residents shall be eligible for membership whether or not they are duly licensed and registered to practice in the State of New York. The resident members will have all the rights and privileges of active membership. Dues and assessments for the members in continuous residency training shall be no more than one tenth the amount levied on all other active members."
>
> "Except by the approval of the Council, no resident may be a member in a component county medical society other than that of the county where he is in residency training or where he maintains his legal residence."

ARTICLE II, SECTION I — AMENDED BY THE ADDITION OF PARAGRAPHS 9 and 10

> "Resident membership shall be limited to graduates of recognized medical or osteopathic schools who are in continuous residency training and who are resident members of a component county medical society. Any resident who is unable to join the component county medical society (societies) not withstanding the provisions of Article XVIII, Section 2, paragraphs 5 and 6 of these Bylaws shall be eligible to join the Medical Society of the State of New York directly as a resident member."
>
> "This provision shall not affect the status of any individual currently in continuous residency training who became a member of a component county medical society prior to October, 1981."

ARTICLE II, SECTION 2 — AMENDED BY THE ADDITION OF A NEW PARAGRAPH AFTER PARAGRAPH 4

> "The dues and assessments of resident members shall be no more than one tenth the amount levied on all other active members. The resident members shall be accorded all the rights and privileges of active membership. They shall be entitled to receive the Medical Directory of New York State only on request."

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* These Amendments were Incorporated in the 1981 Revised Bylaws and Published in the January, 1982, Issue of the *New York State Journal of Medicine* (pages 107-126).

On October 23, 1981, Presidents, Secretaries, Executive Directors/Secretaries of component county medical societies, and Presidents of district branches were made aware of the requirements of Resolution 80-31 so that immediate steps could be taken to amend the constitution and/or bylaws of the component medical societies in order for them to be in compliance with the resolution.

It was noted that any inquiries concerning Resolution 80-31 be directed to the Office of General Counsel at the MSSNY headquarters.

Student Membership* Resolution 80-32, "*Student Membership*" (page 465), was amended and adopted as amended by the House. The last sentence of Article II, Section 1, paragraph 4 now reads as follows:

> ". . . When a student member ceases to be enrolled in a recognized school of medicine or school of osteopathy in the State of New York pursuing a course of study leading to a degree of Doctor of Medicine or Doctor of Osteopathy, other than by reason of graduation, he shall be considered to have resigned from membership in the Medical Society of the State of New York."

On November 4, 1981, Charles Cattano, Chairperson of the Medical Student Membership, was requested to inform the Medical Student Membership of this Bylaws change which affects the student members.

Membership for Students Enrolled in Osteopathic Schools* The House adopted Resolution 80-33, "*Membership for Students Enrolled in Osteopathic Schools*" (page 466), thereby amending Article II, Section 1, paragraphs 4 and 5 of the Bylaws to read as follows:

> "Student members shall be those members enrolled in recognized medical or osteopathic schools in the State of New York who are pursuing a course of study leading to the degree of Doctor of Medicine or Doctor of Osteopathy. Eligible students may become members of the Medical Society of the State of New York. Concurrent membership in a component county society and the American Medical Association is not a requirement for student membership. They shall apply for student membership on a form supplied by the secretary together with such dues as are fixed by the House of Delegates. When a student member ceases to be enrolled in a recognized school of medicine or school of osteopathy in the State of New York pursuing a course of study leading to a degree of Doctor of Medicine or Doctor of Osteopathy, other than by reason of graduation, he shall be considered to have resigned from membership in the Medical Society of the State of New York."
>
> "A student member who is suspended from the rights and privileges of his medical or osteopathic school shall likewise be suspended for the same period from the Medical Society of the State of New York."

On October 19, 1981, the Vice Chairperson of the MSSNY Medical Student Membership invited the representative of the student body of the New York College of Osteopathic Medicine to meet with MSSNY representatives to discuss the possibility of representation in the Medical Student Membership of the MSSNY.

Introduction of Resolutions* The House adopted Resolution 80-51, "*Introduction of Resolutions*" (page 467) as amended. Article III, Section 3, paragraph 4 of the Bylaws now reads as follows:

> "Resolutions may be submitted to the House of Delegates only by members of the House of Delegates as individuals, or by component county medical societies, district branches, scientific section delegates, student membership delegates, and medical school delegates."

Charles Cattano, Chairperson of the Medical Student Membership, was requested to inform the Medical Student Membership of this Bylaws change.

BYLAWS
AMENDMENTS PROPOSED

Resolutions 81-3, "*Chairman of the Board of Trustees as a member of the Executive Committee,*" 81-7, "*Rescinding of Continuing Medical Education Requirement for Membership,*" 81-41, "*Proposed Member of the Medical Student Membership as a MSSNY Delegate to the AMA House of Delegates,*" and 81-43, "*Student Membership in County Medical Societies,*" were considered by the House Committee on Bylaws (pages 630-631).

Its annual report to the House of Delegates has been published in the September, 1982, issue of the *New York State Journal of Medicine*, Vol. 82, No. 10.

AMENDMENTS REFERRED BACK TO THE HOUSE COMMITTEE ON BYLAWS

The House referred the following resolutions back to the House Committee on Bylaws (pages 456-457): Resolution 79-27, "*Age Qualifications for Entitlement to Life Membership for Practicing Physicians,*" 79-39, "*Life Membership,*" and the substitute resolution for Resolutions 79-27 and 79-39. Also referred back was Resolution 80-27, "*Proposed Revisions to the Principles of Professional Conduct.*" These resolutions are now under consideration by the House Committee on Bylaws, and its recommendations relative to the above resolutions were published in the September 1, 1982, issue of the *New York State Journal of Medicine.*

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* These Amendments were Incorporated in the 1981 Revised Bylaws and Published in the January, 1982, Issue of the *New York State Journal of Medicine* (pages 107-126).

Cardiopulmonary Resuscitation (CPR). The House of Delegates adopted Resolution 81-45, "*Continued Proficiency in Cardiopulmonary Resuscitation*" (page 594), which requested that the Medical Society of the State of New York encourage physicians to remain proficient in Cardiopulmonary Resuscitation. On November 15, 1981, the membership was informed of the action of the House through the *News of New York.*

Child Restraint. Resolution 81-47, "*Supporting the Law Regarding Car Seats for Children Under the Age of Five*" (page 598), requested that the MSSNY promote the use of protective passive restraint systems for children under five years of age. The House adopted Resolution 81-47, as amended by the Reference Committee on Public Health and Education. The membership was informed of the action of the House in the *News of New York* on November 1, 1981. The Director of the Division of Governmental Affairs was also informed of the action of the House relative to this resolution.

The Committee on State Legislation notes in its annual report that Chapter 407 of the Laws of 1981 required children under the age of five to be restrained in specially designed detachable or removable seats. Chapter 29 of the Laws of 1982 amended that Law to apply to children under the age of four and to require four- or five-year-old children to be restrained in such a seat or by a safety belt. Both measures were supported by the State Medical Society.

CME. Resolution 81-50, "*Opposition to Mandated CME for Reregistration of State License to Practice Medicine*" (page 595), was adopted by the House. Resolution 81-50 called upon the Society to oppose any state or federal legislation and/or regulation which mandates proof of CME for reregistration of a license to practice medicine.

On October 30, 1981, Resolution 81-50 was forwarded to the Chairman of the Committee on Continuing Medical Education for the information and guidance of the committee. The Chairmen of the Committees on Federal and State Legislation were requested to continue to oppose such legislation and/or regulation, and on November 1, 1981, the membership was informed of the action of the House through the *News of New York.*

The Committee on State Legislation informed the Council on April 22, 1982, that no legislation requiring mandated CME for a license to practice medicine had yet been introduced.

Commendations. Resolution 81-12, "*John T. Farrar, M.D., in Appreciation of Services as Past Chairperson of the Medical Student Membership of the Medical Society of the State of New York*" (page 627), was adopted by the House. On November 4, 1981, a letter was written to Mr. Farrar, on behalf of the Medical Student Membership and the House of Delegates of MSSNY, expressing appreciation for his dedication and accomplishments as Past-Chairperson of the Medical Student Membership. A copy of the resolution was sent to Mr. Farrar as an expression of gratitude.

Resolution 81-14, "*Mr. Guy D. Beaumont, in Appreciation of Services as Liaison to the Medical Student Membership of MSSNY,*" (page 627) was adopted by the House. On October 30, 1981, a letter was written to Mr. Beaumont, on behalf of the Medical Student Membership and the House of Delegates of MSSNY, expressing gratitude for his years of dedicated service to the medical profession and the people of New York State at the state and national levels of organized medicine, as the Director of the Division of Communications of MSSNY. A copy of the resolution was sent to Mr. Beaumont as an expression of appreciation.

Resolution 81-57, "*Commendation to the American Association of Medical Assistants*" (page 628), was adopted by the House. On November 2, 1981, letters were sent to Ms. Margaret Retoske, CMA-AC, President, and Ms. Ina L. Yenerich, Executive Director, of the American Association of Medical Assistants, enclosing a copy of the resolution, and expressing appreciation to Ms. Retoske for eloquently addressing the House of Delegates.

In addition, Presidents, Secretaries, Executive Directors/Secretaries of component county medical societies were informed that the House of Delegates had adopted Resolution 81-57, the resolved portions of which read as follows:

> **Resolved,** That the Medical Society of the State of New York hereby commend the American Association of Medical Assistants for their devotion and accomplishments in the field of medical assisting education, both locally and nationally; and be it further
>
> **Resolved,** That the MSSNY request all of its county medical societies to continue active, formal support of this organization and further urge individual physicians to pay the dues of their medical assistants, so that membership in this most important and worthwhile organization will continue to grow.

On November 6, 1981, Ms. Yenerich expressed appreciation on behalf of all medical assistants for the resolution of commendation to the American Association of Medical Assistants. Ms. Yenerich stated that such outstanding recognition by the New York physicians is sincerely appreciated. AAMA members are indeed dedicated to their professional growth, and loyal to their doctors and patients. As AAMA moves toward its 50th year, they look forward to the continued recognition and support of physicians.

Domiciliary Care Facilities. The House of Delegates referred Resolution 81-20, "*Medical Personnel, Such as Nurses, on Staff at Domiciliary Care Facilities*" (page 595), to the Council for further study. The resolved portions of Resolution 81-20 read as follows:

> **Resolved,** That the Medical Society of the State of New York investigate the rationale for the regulation which prohibits reimbursement for a medically trained individual on staff at a domiciliary care facility; and be it further
>
> **Resolved,** That the MSSNY actively advocate the revision of any such regulation in such a way that a domiciliary care facility allow reimbursement for an "on staff" medically trained individual.

At its meeting on November 12, 1981, the Council referred Resolution 81-20 to the Committee on Aging and

Nursing Homes for further study.

At its meeting on March 25, 1982, the Council considered the following substitute resolution submitted by the Committee on Aging and Nursing Homes:

> **Resolved,** That the Committee on Aging and Nursing Homes and the Medical Society of the State of New York recognize that many of the domiciliary care facilities have patients who require some form of medical supervision; and be it further
>
> **Resolved,** That the MSSNY advocate that domiciliary care facilities who have patients who require some form of medical supervision be allowed to have a health care professional (nurse) present, and that the facility be reimbursed for such services.

The Council disapproved the substitute resolution proposed by the Committee on Aging and Nursing Homes and referred Resolution 81-20 back to the Committee for further evaluation.

The Committee on Aging and Nursing Homes notes in its annual report that the Committee will meet following the House of Delegates meeting and will consider further action at that time on Resolution 81-20.

Driving While Intoxicated (DWI). Resolution 81-38, *"Driving While Intoxicated"* (page 598), as amended by the Reference Committee on Public Health and Education, was adopted by the House. Resolution 81-38 requested the MSSNY to support citizens' groups working to reduce the death and injury toll caused by drunken driving, and that MSSNY instruct its appropriate committees to sponsor legislation relating to the drinking driver and to serve as a liaison between the medical profession and citizens' groups to help coordinate a comprehensive program against alcoholism.

The Chairmen of the Committees on State Legislation and Alcoholism were informed of the action of the House, and requested to work toward the implementation of this resolution. The membership was informed of the action of the House through the *News of New York* on November 15, 1981.

The House of Delegates adopted Resolution 81-37, *"Laws Governing Driving While Intoxicated"* (page 594). Resolution 81-37 called upon the Medical Society of the State of New York to actively participate, through their legislative consultants and other appropriate channels, in supporting anti-drunk driving measures in the legislature; and that MSSNY, through its legislative consultants, propose legislation which would effectively remove intoxicated drivers from the road by either an immediate temporary suspension of a drivers license or an immediate revocation of a drivers license based upon the blood alcohol content of the driver sufficient to convict of "Driving While Intoxicated: rather than "Driving While Impaired."

On October 30, 1981, the Chairman of the Committee on State Legislation was requested to assist in the implementation of this resolution.

At its meeting on April 22, 1982, the Committee on State Legislation informed the Council that the Committee had reviewed Resolutions 81-37 and 81-38. The Committee noted that substantial revisions to the law increasing penalties and establishing programs to reduce injuries were enacted last year with the support of the Medical Society. It was felt that if additional legislation is needed it would certainly be supported by the Society after careful review.

The Committee on State Legislation notes in its annual report that several additional proposals introduced during the 1982 session and actively supported by the Society's representatives in Albany, were passed by the Legislature and are awaiting action by the Governor. The final status of these bills will be included in the brochure of Health Legislation which will be available at the House of Delegates meeting.

PROGRAMS FOR IDENTIFICATION, REHABILITATION, AND TREATMENT OF THE DRINKING DRIVER—DWI LAW
(page 594)

The Reference Committee on Public Health and Education heard testimony that a law had been passed earlier in the year increasing the fines for driving while intoxicated, and establishing a mechanism whereby counties could set up programs for the identification, rehabilitation and treatment of the drinking driver. Since this law was due to be implemented on November 1, 1981, the reference committee felt that urgent action was indicated on the part of the Medical Society of the State of New York.

The reference committee recommended that the Medical Society of the State of New York inform its component county medical societies on an urgent basis of the details of this law and how local physicians may become involved in its implementation. The reference committee further recommended that the MSSNY urge the county medical societies to involve themselves and their members in this worthy endeavor.

The House approved the recommendation of the reference committee. On November 9, 1981, Presidents, Secretaries, and Executive Directors/Secretaries of component county medical societies were forwarded a copy of amendments to Article 43-A of the Vehicle and Traffic Law of New York State which were passed and signed into law as of July 1, 1981, and became effective on November 1, 1981. The copy of the law gave the county societies detailed information on how these programs can be organized, and it was urged that physicians take the lead through the county societies in this important public health and education activity. MSSNY urged that appropriate officials in the counties be contacted to impress upon them the urgency of this matter, and to volunteer the services of the county society and its members.

Dues Increase Allocation (page 490). The House adopted the recommendation of the Reference Committee on Reports of Officers that the $50 dues increase, approved in 1977, become a permanent part of our dues and no longer be considered for allocation to other areas.

On October 28, 1981, the Chairman of the Committee on Budget and Finance and the Chairman of the Board of Trustees were informed of the action of the House.

Empire State Medical, Scientific, and Educational Foundation, Inc. The House of Delegates adopted a substitute resolution for Resolution 81-39, *"Voluntary Contribution to the Empire State Medical, Scientific, and Educational Foundation, Inc."* (page 541), which requested that the

Medical Society of the State of New York publicize and explain the function of the Empire State Medical, Scientific, and Educational Foundation, Inc., and encourage the Foundation to solicit voluntary contributions to carry out the work of the Foundation; the Foundation to provide funding for the solicitation of voluntary contributions.

On October 28, 1981, the President of the Empire State Medical, Scientific, and Educational Foundation, Inc. was informed of the action of the House and requested to implement this resolution.

At its meeting on November 11, 1981, the members of the Empire State Medical, Scientific, and Education Foundation, Inc., voted unanimously to approve substitute Resolution 81-39, with the recommendation that a letter be prepared by J. Richard Burns, J.D., General Counsel, which would be distributed to the MSSNY membership soliciting voluntary contributions, with the approval of the Executive Committee.

G. Rehmi Denton, M.D., President, Empire State Medical, Scientific, and Educational Foundation, Inc., sent a letter to members of the Medical Society of the State of New York explaining the purposes of the Foundation and some of the activities which it has sponsored in the past. Dr. Denton requested financial support from the membership so that the Foundation can reverse its recent inactivity and resume its role as the sponsor of many more meaningful research projects.

Foreign Medical School Graduates. The House adopted the Annual Report of the Committee on Medical School Relationships in lieu of Resolution 81-29, *"Entrance of Foreign Medical School Trainees to Clinical Clerkships in the Hospitals of New York State"* (page 597). Resolution 81-29 requested that the Medical Society of the State of New York oppose the implementation of the New York State Board of Regents plan to accredit foreign medical schools, and that the MSSNY endeavor to seek amendments either by regulation or by legislation, so as to annul these regulations.

On November 2, 1981, the Chairman of the Committee on Medical School Relationships was informed of the action of the House.

In its report to the Council on March 25, 1982, the Committee on Medical School Relationships discussed offshore medical schools and the acceptance of their students at hospitals in New York State for clinical clerkships in accordance with a proposal by the Board of Regents. The committee expressed concern about the quality of education that these students receive and the overall impact of their acceptance for clerkships on the medical profession, and agreed that the situation must be monitored to insure that the Regents proposal is being followed and conducted properly.

The Council approved the Committee's recommendation that the MSSNY should take the initiative and assume a leadership role by organizing a meeting of the directors of medical education to discuss this problem and develop a monitoring mechanism.

Home Health Care. The House adopted Resolution 81-36, *"Home Health Care Aides and Reimbursement for Same"* (page 619). On November 10, 1981, the Chairman of the Committee on Home Health Care and Hospice was requested to work toward the implementation of Resolution 81-36, the resolved portions of which read as follows:

> **Resolved,** That the Medical Society of the State of New York thoroughly investigate the potential of the home health care aide as a positive factor for mitigating the cost crisis, and the acute care bed problem; and be it further
>
> **Resolved,** That the MSSNY as a part of the aforementioned study also examine the reimbursement mechanisms by which our elderly currently have access to home health care and home health care aides; and be it further
>
> **Resolved,** That MSSNY, contingent upon the outcome of their study, vigorously advocate those components of the study which show indications of cost effectiveness, show potential for lessening the pressure on acute care beds, and create reasonable reimbursement mechanisms for home health care aides and agencies.

The Committee on Home Health Care & Hospice notes in its annual report that the New York State Department of Health is, at present, in the middle of a three-pronged evaluation, which will attempt to gather information on Home Health Care Programs and Hospice Programs. Statistical data is being gathered through questionnaires from the patient and family. This study should be finished by the early part of 1983 and a further report will then be made.

Income Tax Tuition Deduction. The House referred Resolution 81-60, *"New York State Income Tax Tuition Deduction"* (page 561), to the Council. Resolution 81-60 requested that the Medical Society of the State of New York sponsor and support legislation pertaining to a change in the regulations regarding the ability of a husband/wife to claim as a dependent, for the purposes of the Income Tax Tuition Deduction, his/her student spouse, such that the said husband/wife might be properly eligible to take such a deduction.

The Reference Committee on Governmental Affairs and Legal Matters agreed with the intent of Resolution 81-60 but felt that further in-depth study of the problem was necessary. At its meeting on November 12, 1981, the Council referred Resolution 81-60 to the Committee on State Legislation for evaluation, in consultation with the office of General Counsel.

The Committee on State Legislation discussed Resolution 81-60 and reported to the Council on April 22, 1982, that it had been pointed out by our legislative representative that under the current budgetary pressures being experienced by the State, an additional deduction, no matter how meritorious, would be extremely difficult to obtain. It was further noted that efforts to implement this resolution were necessarily diverted when the Governor's message indicated that the Supplemental Student Loan Program was slated for elimination from the budget. Extensive efforts were then turned toward restoring State funding for tuition assistance and indications are that both the Senate and the Assembly are determined to develop and maintain a viable educational assistance program.

The Committee on State Legislation notes in its annual report that this resolution was discussed at the Committee meeting on March 15, 1982, but the Committee was unaware that the resolution had been referred without having been adopted. The resolution will be placed on the agenda for the next Committee meeting in September.

Malpractice. The Reference Committee on Governmental Affairs and Legal Matters considered Resolution 81-35, *"Malpractice Crisis"* (page 558), Resolution 81-48, *"Equal Medical Liability Insurance Premiums for All Physicians"* (page 558), and Resolution 81-52, *"Opposition to 'Claims Made' Medical Liability Insurance Coverage"* (page 558), together, and presented a substitute resolution for the consideration of the House.

The House adopted the following amended substitute resolution:

> **Resolved,** That the Medical Society of the State of New York continue to advise all appropriate government officials and the public that a medical liability crisis exists which poses a grave threat to the quality of health care available to the people of this State, and that no increase in the cost of medical liability insurance is acceptable; and be it further
>
> **Resolved,** That the Medical Society of the State of New York unequivocally oppose "claims made" policies because such policies do nothing to reduce the cost of medical liability insurance; and be it further
>
> **Resolved,** That the Medical Society of the State of New York continue to seek passage of a legislative program which includes meaningful solutions to this crisis. These proposals will restore equity and fairness to the liability adjudicatory process.

On October 21, 1981, Milton Rosenberg, M.D., President, advised Superintendent of Insurance Albert B. Lewis that the House of Delegates of the Medical Society of the State of New York had approved a resolution expressing unequivocal opposition to "claims made" policies, and urged the Superintendent not to authorize "claims made" policies as an alternative to the present claims occurrence type of insurance. Dr. Rosenberg enclosed a copy of his report dealing with his study of the "claims made" experience in California.

Dr. Rosenberg expressed the hope that, with the cooperation of the Executive Branch of the State Government, along with that of enlightened legislative leaders, proper changes in the tort liability system would be made that would be a permanent answer to what can properly be described as a "medical malpractice crisis."

On October 23, 1981, a copy of the resolution, Dr. Rosenberg's communication to the Superintendent of Insurance, and a copy of the *News of New York* of October 1, 1981, dealing with the extensive study conducted by Dr. Rosenberg of the "claims made" experience in California, were sent to Governor Carey and the members of the New York State Legislature, calling for their support and action. It was noted that the solution to this festering problem will not be achieved without equitable and expeditious action by the State Legislature.

In addition, the Society's representatives in Albany, in regular meetings with legislative leaders, repeatedly pointed out the serious shortcomings and deficiencies of the claims-made approach and the necessity for immediate enactment of substantial malpractice reform legislation.

An Ad Hoc Committee on Malpractice was established by the Society, which was instrumental in developing an Omnibus Medical Catastrophe Fund Proposal. The proposal encompassed two separate approaches: 1) the creation of a medical Catastrophe Fund designed to attempt to limit the contingent liability of the physicians at a certain threshhold, financed through a surcharge levied on all accident and health insurance premiums, and 2) measures to address tort changes, i.e., elimination of suits without merit, future payments of future damages and the expedition of the adjudicatory process. The primary purpose was initially to present to the Governor and the leadership of the Legislature a comprehensive package for their evaluation and review, and to assist them in their efforts to prepare meaningful legislation. The proposal was sent to the Governor on December 2, 1981, with copies to key legislators, the Department of Insurance and the Commissioner of Health.

In view of the apparent lack of movement on the part of the leadership in response to the malpractice situation, the MSSNY sought sponsors, and the bill was formally introduced into the Legislature on March 22, 1982. In response to pressure by the Medical Society, including the introduction of the omnibus bill, the Governor transmitted a proposed "Catastrophe Fund" bill to the New York State Legislature on April 7, 1982, as part of his 1982 legislative program. The Ad Hoc Committee on Malpractice met on April 16, 1982, to review and critique the entire proposal. The Committee felt that, on balance, the bill created no real substantive problems and that the acceptance of the concept of the fund was a tremendous step forward. The Council was informed that there would be extensive contacts and negotiations between the Ad Hoc Committee on Malpractice and the Governor's Joint Legislative Task Force on Malpractice, to be followed by meetings with the leadership of the various important committees involved in the legislative process. County medical societies, the specialty societies, and the Auxiliary were urged to become involved in a very direct, specific, and organized way with their local legislators to seek support for the measure. County medical societies were reimbursed in part by the State Society for their efforts in securing active support of local legislators.

Dr. Rosenberg informed the membership on May 1, 1982, through the *News of New York* that the Governor's Medical Catastrophe Fund Bill did not have a chance of passing. Its opponents, especially the Blue Cross and Blue Shield plans, had mounted an extremely heavy and efficient legislative campaign. The quality and quantity of physicians' contacts with local legislators since MSSNY's May 3rd Hotline to members had not remotely approached the letters and calls from the grass roots summoned by the opponents of the fund. Although Dr. Rosenberg expressed disappointment with the events, he noted that the present situation does not mean that activities undertaken throughout the State to inform the local legislators that the liability insurance crisis has not abated should cease. The unconscionable burden of escalating premiums must be eased, either by tort reform or the concept of spreading the risk.

The State Legislation Committee, in its report to the Council in June, stated:

> "Action on the Governor's malpractice bill has been forestalled by the intensity of the opposition to the catastrophic funding provisions of the proposal. A number of alternative variations of the source out of which the 'fund' would be funded which were put forward by MSSNY have also met with opposition. Exacerbating the problem is the fact that many legislators are reluctant to act on a bill which involves a solution regarded by many as quite radical until a determination has been made by the Insurance Department regarding the proposed rate increase filed by MLMIC. Many legislators are hopeful that the Insurance Department will approve no increase or a relatively small increase, thus, permitting more time to continue investigating other legislative solutions."

The Professional Medical Liability Insurance and Defense Board notes in its annual report that the Insurance Department has approved a claims-made policy which will be 34% of the occurrence rate for the first year, but will rise dramatically thereafter and will equal and may even exceed the occurrence rate by the fourth or fifth year. The limitation of the increase and the claims-made policy should not distract us from the essential fact that the size of awards continues to escalate dramatically and the ultimate burden still rests on the physicians in this state who must pay the onerous premiums. The Medical Society and the Company have continued to exert their very best efforts to convey this message to the legislature. While attempts to enact the Medical Catastrophe Fund Bill did not meet with success, it was no small accomplishment that the Chief Executive of this State publicly acknowledged that doctors could no longer be asked to bear the burden of an intolerable system alone. It is also interesting to note that many of the forces who vigorously opposed the Catastrophe Fund concept indicated their willingness to be completely supportive of our program to accomplish tort reform. Efforts are under way to mobilize that support.

MEDICAID

Medicaid Audits. The House referred Resolution 81-30, *"Medicaid Audits of Physician Billing Procedures"* (page 619), to the Council. The resolved portions of Resolution 81-30 reads as follows:

> **Resolved,** That the Medical Society of the State of New York make known to the New York State Department of Social Services its extreme dissatisfaction with the present system of audit and that it apply the technical, legal, and manpower resources necessary to seek relief from the practices currently employed in the audit procedure; and be it further
>
> **Resolved,** That the MSSNY actively consider and retain as a viable option a legal challenge to the current audit procedures.

At its meeting on November 12, 1981, the Council tabled Resolution 81-30 until the meeting of the Council on January 14, 1982, in order to give staff an opportunity to research the option of legally challenging the Bureau of Medicaid Fraud and Abuse, and report back to the Council. The Director of the Division of Medical Services, and General Counsel were requested to report their findings to the Council.

The Committee on Medicaid informed the Council on April 22, 1982, that Resolution 81-30 was reviewed by the Legal Department of MSSNY and they felt that this should be held in abeyance pending the outcome of the Broome County hearings. The Council approved the recommendation of the Committee that Resolution 81-30 be tabled until such time as the legal hearings currently pending in Broome County are resolved.

Prescriptions for Medicaid Patients. The following substitute resolution for Resolution 81-33, *"Prescriptions for Medicaid Patients"* (page 619), was adopted by the House:

> **Resolved,** That the Medical Society of the State of New York enter into discussions with the appropriate New York State officials, and the appropriate State Pharmaceutical Association officials, to simplify the regulations for prescribing medication for Medicaid patients.

On November 5, 1981, Resolution 81-33 was forwarded to the Director of the Division of Medical Services for implementation.

The Committee on Medicaid, in its report to the Council on April 22, 1982, noted that the Medicaid Formulary is made up by pharmacists and physicians selected by the pharmacists and that no attempt has been made to secure input from the State Medical Society. It was further noted that certain minimal federal guidelines are established but that states can alter their own requirements as long as they meet the minimal federal specifications. It was felt that MSSNY should attempt to enter into discussions with the pharmaceutical association(s) and attempt to secure an understanding as to how the entire prescribing problem can be simplified and be made more efficient. The Council approved the Committee's recommendation that the intent of this resolution be explored with the pharmaceutical association and with such other responsible governmental agencies that are involved in this area.

The Committee on Medicaid notes in its annual report that the Westchester County Medical Society, which introduced the resolution, was contacted in an effort to obtain more detailed information as to the nature of the actual problem and to have the physicians in that area, who are directly concerned, provide MSSNY with concrete illustrations of the problem. The pharmaceutical societies have been contacted and are willing to meet when we can present specific statements of the problem. This problem will be continually monitored.

Medicaid Reimbursement. Resolution 81-34, *"Medicaid Reimbursement"* (page 618), was adopted by the House. The resolved portions of Resolution 81-34 read as follows:

> **Resolved,** That discussions relative to increased Medicaid reimbursement continue at an accelerated pace between the Government of the State of New York and

the Medical Society of the State of New York; and be it further

Resolved, That proposed increases more closely reflect usual and customary fees; and be it further

Resolved, That if the discussions are not productive in a reasonable time period, that MSSNY inform the membership in a clear and forthright manner.

On November 5, 1981, the Chairman of the Committee on Medicaid and the Director of the Division of Medical Services were informed of the action of the House. It was noted that further efforts by the Committee on Medicaid to realize the goals of this resolution would be appreciated.

Daniel F. O'Keeffe, M.D., the Chairman of the Commission on Medical Services, informed Dr. Siegel on October 30, 1981, that representatives of the MSSNY met with the Senior Counsel to the U.S. Senate Finance Committee in Washington to discuss the existence, in New York State, of an essentially two-tiered system of care for Medicaid recipients versus other citizens which does not comply with either the word or spirit of the law. It was confirmed that in actuality the legislation gives each state broad leeway as to the extent and method of implementation, and it was felt, therefore, that it would be useless to challenge New York State's administration of Title XIX on this basis.

The Medicaid Committee reported to the Council on April 22, 1982. The Committee emphatically felt that the physicians in New York State are not going to get a fee increase; that they are up against a stone wall as far as the State is concerned. The Committee felt that this should be publicized, making people aware that fees still remain at 1968 rates; perhaps legislators would take some political action if it is brought to their attention.

The Committee developed a position paper on Medicaid, which dealt with the issues in the resolution and was approved by the Council. The Committee felt that the intent of this resolution would be met by disseminating the position paper throughout the State via the *News of New York*. The May 1, 1982, issue of the *News of New York* informed the membership of the Society's position on Medicaid. The text of the policy statement reads as follows:

MEDICAID POSITION PAPER

The position of the Medical Society of the State of New York is that all Title XIX (Medicaid) recipients must have equal access to high quality health care along with freedom of choice as to the source from which they receive such care. This quality care should be delivered in an efficient manner by appropriately recognized and varying alternative mechanisms of medical care delivery.

Reimbursement for medical services rendered to Title XIX (Medicaid) patients must be based on a realistic fee pattern, in keeping with current economic realities and with the physician mode of practice. Such fee patterns must be subject to periodic adjustments in the same manner as are all other recognized alternative mechanisms of medical care delivery.

Further, there should be a

1. Return of Medicaid patients to the offices of practicing physicians by revising the New York State Medicaid fee schedule to provide usual and customary fees, or to implement a realistically higher fixed fee schedule.
2. Well developed peer review system, administered by physicians at the local level and providing for an adequate appeals mechanism through physician ombudsmen.
3. Development of a program that would provide incentives to physicians for locating in underserved areas.
4. Unification of administrative and fiscal Medicaid responsibilities within a *single* Department at the State level.

Medicaid Management Information System. The House referred Resolution 81-44, *"An Investigation of the Medicaid Management Information System"* (page 620), to the Council. The resolution requested the MSSNY to make every effort to have the Medicaid Management Information System contract reevaluated to determine its effectiveness. At its meeting on November 12, 1981, the Council referred Resolution 81-44 to the Committee on Medicaid.

In its report to the Council on April 22, 1982, the Committee on Medicaid recommended that since legal counsel had advised that the intent of this resolution could not readily be accomplished, Resolution 81-44 be tabled. The Council referred Resolution 81-44 back to the Committee on Medicaid pending further information on this matter.

Payment For Specialized Services Under Medicaid. Resolution 81-53, *"Payment For Specialized Services Under Medicaid"* (page 618), was adopted by the House. Resolution 81-53 reads as follows:

Whereas, Section 505.2 (f) (ii) of the Social Services regulations provides that only Board certified physicians qualify for payment for specialty services rendered to Medicaid patients; and

Whereas, Such regulation does not conform to the practical realities extant in many parts of the state wherein Board certified specialists are often not available to provide such services; and

Whereas, Section 405.1023 of the Commissioner of Health's regulations (10 NYCRR 405.1023) provides standards pertaining to a hospital's medical staff and specifically states that "(t)he Governing body has the legal right to appoint the medical staff and the moral obligation to appoint only those physicians who are judged by their fellows to be of good character, and qualified, and competent in their respective fields"; and

Whereas, This section further provides that "under no circumstances is the accordance of staff membership or professional privileges in the hospital dependent solely upon certification, fellowship, or membership in a specialty body or society"; and

Whereas, Section 405.1031(b)(2)(iv) provides that "(t)he hospital staff designates those persons qualified to administer anesthetics and delineates what the person is qualified to do"; and

Whereas, Each of these sections is identical to the Federal Conditions of Participation required under Titles XVIII and XIX of the Social Security Act as noted in Section 405.1; therefore be it

Resolved, That the Medical Society of the State of New York seek the rescission of Section 505.2(f) (ii) of the Regulations of the Department of Social Services; and be it further

Resolved, That all services which are provided by physicians who have been authorized by their hospital to render such services qualify for reimbursement under Title XIX.

On November 5, 1981, Resolution 81-53 was referred to the Chairman of the Committee on Medicaid to seek its implementation.

At its meeting on December 17, 1981, the Council was informed by the Director of the Division of Medical Services that he had researched the accuracy of the facts presented by the Medical Society of the Council of Oneida in this resolution, and noted the following:

> "The regulation referred to in the first whereas is inaccurately identified. It should be 505.2(ii) and not 505.2(f) (ii) as stated, and is found in the Department of Social Services Regulations (18 New York Codes, Rules and Regulations). Additionally, it is taken out of context with respect to the rest of the section. The regulation does not state that *only* Board certified physicians are the *only* physicians that can be reimbursed under Medicaid, but outlines five methods by which a physician can be recognized as a specialist eligible to receive reimbursement. This section applies to Medicare. However, it has been taken word for word and included in the MMIS Provider Manual, Section 2.2.1 C as qualifications under Title XIX.
>
> "Since the initial whereas is inaccurate, the whereas following and the resolves are faulty and, if successfully pursued as passed by the House, would defeat the very intent of the resolution."

The Council adopted the recommendation that, based on the additional information received, the resolution not be implemented.

On January 8, 1982, Francis Chanatry, M.D., President of the Medical Society of the County of Oneida, Inc., was informed of the Council's decision and was requested to submit comments.

MEDICAL SCHOOL PROGRAMS

Alcohol and Drug Abuse Teaching Programs. The House adopted Resolution 81-4, "Alcohol and Drug Abuse Teaching Programs in Medical Schools" (page 596), as amended by the Reference Committee on Public Health and Education. The resolved portion of Resolution 81-4 reads as follows:

> **Resolved,** That the Medical Society of the State of New York recommend that all medical schools in New York State develop teaching programs on alcoholism and drug abuse on both the undergraduate and graduate level, where programs do not exist.

Early Courses for Freshmen Medical Students. The House adopted Resolution 81-59, *"Early Courses for Freshman Medical Students"* (page 599), as amended by the Reference Committee on Public Health and Education. The resolved portions of Resolutin 81-59 read as follows:

Resolved, That the Medical Society of the State of New York recommend to medical schools in New York State that each school notify all incoming freshmen medical students of the availability of any summer preparatory courses at the school and that the selections be made on the basis of educational disadvantage; and be it further

Resolved, That this recommendation be transmitted to the deans of all medical schools in New York State.

Education and Research of Geriatric Medicine. The House adopted Resolution 81-58, *"Education and Research of Geriatric Medicine"* (page 598), as amended by the Reference Committee on Public Health and Education. The resolved portions of Resolution 81-58 read as follows:

> **Resolved,** That the Medical Society of the State of New York support the need for bona fide medically oriented research in the field of geriatric care; and be it further
>
> **Resolved,** That the MSSNY encourage New York State medical schools to develop or establish curricula in geriatric medical education.

On November 2, 1981, the Chairman of the Committee on Medical School Relationships was requested to seek the implementation of these resolutions through the efforts of the committee; and the Deans of the twelve medical schools were requested to give them careful consideration.

On November 6, 1981, Stanley L. Lee, M.D., Dean and Vice-President for Academic Affairs of the State University of New York Downstate Medical Center replied that Downstate is the leading site for the training of career teachers in alcohol and drug abuse and has pioneered in the development of programs in undergraduate, graduate, and continuing medical education. Dr. Lee stated that Downstate is moving rapidly toward the development of a plan for a center in geriatrics education in collaboration with the Brooklyn Veterans Administration Medical Center. Relative to early courses for freshmen medical students, Dr. Lee noted that the summer course for entering medical students given on the Downstate campus over the past few years has been an extra-curricular activity supported entirely by private funds through a local student organization. Faculty participation has been voluntary. The purpose of this course has been remedial and supportive — to minimize the disadvantages of certain minority students. The program has been a resounding success. The college administration is now moving to exercise some responsibility for the continuing operation of the course, and in so doing intends to insure that it fulfill its major purpose for all disadvantaged entering students who are willing to participate in it.

Frank E. Young, M.D., Ph.D., Dean of the School of Medicine and Dentistry of the University of Rochester Medical Center, replied on November 13 that the University of Rochester Medical Center is particularly interested in development of geriatric programs. It has recently formulated a Center for Aging, and has a very close relationship with Monroe Community Hospital. Dr. Young noted that there are no early courses for freshmen medical students, and at present there is no formal alcohol and drug abuse teaching program, but the concepts are interwoven with the curriculum.

On December 15, 1981, Joanne Blauer, Secretary of the Cornell University Medical College, stated that the Cornell University Medical College has active teaching programs in place in alcohol and drug abuse. First-year students have this material presented through the Department of Public Health, with a lecture on each topic, followed by seminars for development of the material presented. In addition, in the third year, Cornell students go to an Alcoholics Anonymous meeting, and also visit the head of the Narcotics Squad of the Police Department for instruction and discussion.

Concerning education and research in geriatric medicine, Ms. Blauer noted that Cornell has the first endowed Chair in Geriatric Medicine in the United States. There is an active research program in gerontology, which extends from investigations at the cellular level to health services investigations at a senior citizens housing development nearby. In addition, the institution maintains a fellowship training program in geriatric medicine. Beyond these activities, there is material presented in all of the basic science and clinical departments relative to the spectrum of disease presentations and treatment necessities through the entire range of ages.

Relative to early courses for freshmen medical students, Ms. Blauer stated that the Cornell University Medical College has had special courses for entering educationally disadvantaged first-year students, in place for some years. These activities continue, and are well subscribed to and well received by the students involved.

Ms. Blauer concludes by stating, "We, at Cornell, support the resolutions of the House of Delegates and will continue to build and enhance our programs in these areas."

On April 28, 1982, correspondence was received from Alden N. Haffner, Associate Chancellor for Health Sciences of the State University of New York, forwarding a report concerning the feasibility of establishing a chair in geriatrics at the Upstate Medical Center.

Membership Benefits. The House approved the recommendation of the Reference Committee on Scientific Activities, Publications, and Miscellaneous that county medical societies be kept informed of the activities of the Committee on Membership Benefits via their membership committees (page 625). On November 4, 1981, Presidents, Secretaries, and Executive Directors/Secretaries of component county medical societies were requested to inform their membership committees and to direct any inquiries regarding the MSSNY membership program to Bernard M. Jackson, Director of the Division of Insurance and Membership Benefits. Mr. Jackson was requested to inform the county medical societies of any additional membership benefits programs as soon as they are approved by the Council.

In addition, the *News of New York* regularly informs the membership of available benefits.

New York State Journal of Medicine. The House approved the recommendation of the Reference Committee on Scientific Activities, Publications, and Miscellaneous (page 627) that the following recommendations deserve urgent attention and should be the subject of a detailed report in the coming year:

1) Proposals of the Publications Committee to arrange for an impartial review of the *New York State Journal of Medicine* to help determine its future policy.
2) Creation of a policy board to implement recommendations.
3) A review of the financial status of the *Journal*.

The House also approved the recommendation that a fiscal note be appended by administration to future annual reports of the Publications Committee.

On November 3, 1981, the Chairman of the Publications Committee was notified of the action of the House.

The Committee on Publications notes in its annual report that the recommendations approved by the House of Delegates in 1981 concerning the future policy and the financial considerations of the *Journal* were reviewed by the Committee. The matter of Dr. Angrist's retirement as editor of the *Journal*, and his successor, was discussed. The Committee anticipates that proposals relative to future policy of the *Journal* will be considered and acted upon by the new editor when he assumes this position.

In accordance with the recommendation of the House of Delegates, the Committee included 1981 *Journal* production costs in its annual report.

Nuclear-Related Injury. (See AMA — Report on Actions of the New York Delegation)

NYMPAC and EMPAC. Resolution 81-55, *"Combining of NYMPAC and EMPAC into a Single Political Action Committee"* (page 562), called upon the House of Delegates of the MSSNY to support the combining of the currently existing Political Action Committees; i.e., the New York Medical Political Action Committee (NYMPAC) and the Empire Medical Political Action Committee (EMPAC) into a joint PAC to be called New York Combined Medical Political Action Committee (NYCOMPAC); that the Board of NYCOMPAC direct its activities at all times to the state and federal levels, as appropriate; that MSSNY give full support to "NYCOMPAC" within the limitations imposed by Federal and New York State Law and medical ethics; and that this resolution be referred to the Council of MSSNY for organizational development and implementation at the earliest possible date, in such a manner as to conform to all legal requirements and equitable statewide geographic representation.

The following amended resolution was proposed:

Resolved, That the House of Delegates of the Medical Society of the State of New York support the combining of the currently existing Political Action Committees; i.e., the New York Medical Political Action Committee (NYMPAC) and the Empire Medical Political Action Committee (EMPAC) into a joint PAC; and be it further

Resolved, That the bylaws of the unified PAC specifically provide for two standing subcommittees:

1. A standing subcommittee concerned with federal elections and federal issues;
2. A standing subcommittee concerned with state elections and state issues; and be it further

Resolved, That for the foreseeable future the present division of contributions to the PAC remain at 65 percent for State elections and affairs and 35 percent for federal elections and affairs after administrative expenses; and be it further

Resolved, That any changes in the present distribution of contributions, after administrative expenses, be determined by a majority vote of the contributors to the PAC; and be it further

Resolved, That the Medical Society of the State of New York give full support to Political Action; and be it further

Resolved, That this resolution be referred to the Council of MSSNY for organizational development and implementation at the earliest possible date, in such a manner as to conform to all legal requirements and equitable statewide geographic representation.

The House referred the entire matter to the Council.

At its meeting on November 12, 1981, the Council approved that the MSSNY support the combining of the two currently existing Political Action Committees into a single Political Action Committee. An Ad Hoc Committee was appointed by the President for organizational development, which presented the following recommendations to the Council on December 17, 1982:

1) That the new PAC have a 15-member board, composed as follows:
   a) 1 representative from each district branch
   b) 6 members at large
2) The new board members shall be recommended by the President who shall ask the Council to approve his appointments. This shall be an interim board.
   QUALIFICATIONS FOR BOARD MEMBERSHIP
   a) Known experience, expertise, knowledge, and ability in medical political action
   b) Willingness to serve actively (no figureheads)
3) The new PAC Board shall meet without delay to —
   a) Elect its officers: Chairman, Secretary, two Treasurers
   b) Draw up a set of Bylaws
   c) Establish methods for collection of funds, candidate selection and distribution of funds
4) The NYMPAC and EMPAC Boards are to meet as soon as possible to dissolve their original organizations and turn over funds to the new PAC. This is to be done with appropriate legal advice.
5) The Ad Hoc Committee asked the Council to approve, or endorse, the above recommendations.

RECOMMENDATIONS FOR MEMBERSHIP OF THE NEW BOARD:

	District Branch
John A. Finkbeiner, M.D.	First
Samuel A. Gelfand, M.D.	Second
John H. Carter, M.D.	Third
John L. Clowe, M.D.	Fourth
Frank A. Bersani, M.D.	Fifth
Charles N. Aswad, M.D.	Sixth
Joyce M. McChesney, M.D.	Seventh
William C. Stein, M.D.	Eighth
William P. Clark, M.D.	Ninth

AT LARGE

Henry I. Fineberg, M.D.
Edmond J. Gicewicz, M.D.
George J. Lawrence, Jr., M.D.
Robert J. O'Connor, M.D.
Jack O'Neil, M.D.
Ralph M. Schwartz, M.D.

The above recommendations were approved by the Council.

PEER REVIEW

Physician Peer Review Committee. Resolution 81-10, *"Physician Peer Review Committee"* (page 620), and Resolution 81-26, *"Physician Peer Review Committee"* (page 621), were considered together by the Reference Committee on Medical Services. The House amended Resolution 81-10 and adopted Resolution 81-10 as amended in lieu of Resolution 81-26. Amended Resolution 81-10, which requested that the MSSNY establish a new committee of the Council to devise and recommend for implementation the mechanisms necessary to coordinate and assure that peer review for all patients in the State of New York be done by physicians only at the local level, was referred to the President for implementation.

At its meeting on November 11, 1981, the Executive Committee discussed the advisability of retaining the present PSRO Committee and changing the name of the committee to reflect its new mission. It was decided that the Committee on PSRO continue with its present charge, and that a new committee on peer review be formulated. On December 1, 1981, Dr. Rosenberg appointed a Committee on Peer Review.

In its annual report the Committee on Peer Review noted that it had discussed the many potentialities embodied in Resolution 81-10 passed by the House of Delegates in October, 1981, and also in the AMA Resolution #4 (recognizing that the fifth resolved of this resolution was referred back to the AMA Board of Trustees). Out of this discussion the following motion was made, duly seconded and passed unanimously:

> That peer review must be physician controlled and based upon appropriateness, medical necessity and acceptability of high-quality care. In order to assure that all such peer review remain under physician control in this state, the MSSNY should function in an advisory role in seeing that all presently accepted mechanisms are

fully utilized and to study and to assist in developing new mechanisms as may be required — such mechanisms to be based on regional (local) standards and operations and shall encompass all sources of funding as well as all medical care to whomever and wherever provided.

At its meeting on March 25, 1982, the Council referred this Resolution, along with American Medical Association's principals for voluntary medical peer review, which were adopted by the American Medical Association, December, 1981, in lieu of the fifth resolve of Resolution #4, back to the Committee on Peer Review for further clarification at its next meeting.

In the interim, the American Medical Association has forwarded its June, 1982 update "Implementation of Voluntary Medical Peer Review," which will be reviewed by the MSSNY Peer Review Committee for report to the Council.

Peer Review for Medicaid Patients. The House referred Resolution 81-28, *"Peer Review for Medicaid Patients"* (page 621), and an amended resolution for Resolution 81-28, to the Council. At its meeting on November 12, 1981, the Council amended the first resolved of amended Resolution 81-28, by the deletion of the words "and whose Board of Directors is made up of only MDs and DOs," and approved the following resolution as amended by the House and the Council:

> **Resolved,** That the Medical Society of the State of New York urge New York State to contract Medicaid review to local PSROs that are operational; and be it further
>
> **Resolved,** That in those areas where PSROs are not operative, the Medical Society of the State of New York urge the State of New York to contract Medicaid review with peer review groups organized by local County Medical Societies or District Branches.

In a communication dated December 11, 1981, to Governor Carey, it was noted that —

> "It is the position of the Medical Society of the State of New York (MSSNY) that the PSRO organizations within the State of New York represent a sound and cost-effective method of peer review. This position has been repeatedly substantiated by data arising from the activities of the functioning PSROs, as well as studies released by the Statewide PSRO Council.
>
> "In view of the demonstrated effectiveness of the PSROs in New York State, a fact which obviously reflects the commitment of New York State physicians to top quality care in a cost-effective manner, it would seem opportune and logical that New York State continue to utilize the existing organizational structure, along with the expertise of the existing PSROs in Medicaid Review after January 1, 1981.
>
> "The MSSNY therefore respectfully requests that utilization of the PSRO structure for Medicaid Review after January 1, 1981, be seriously considered."

Copies of the letter were sent to Robert J. Morgado, Secretary to the Governor, David Axelrod, M.D., Commissioner of the New York State Department of Health, Barbara B. Blum, Commissioner of the New York State Department of Social Services, Warren M. Anderson, Majority Leader of the Senate, Stanley Fink, Speaker of the Assembly, Tarky J. Lombardi, Jr., Chairman of the Senate Health Committee, Arthur J. Kremer, Chairman of the Assembly Ways and Means Committee, Mario M. Cuomo, Lieutenant Governor of New York, Statewide PSRO Council, and Constituent Medical Societies.

At its meeting on March 25, 1982, the Council approved the recommendation of the Committee on PSRO that MSSNY support PSRO contract negotiations with the State for Medicaid Review, and that the MSSNY disseminate statewide the Council's approval.

The Council also approved the following resolution on the proposed role of component county medical societies concerning peer review:

> *Whereas,* Local county medical societies represent the best opportunity for broad-based review activities by practicing physicians, thereby furthering the optimal provision of quality medical care for all patients; and
>
> *Whereas,* The Medical Society of the State of New York is anxious to assist, promote, and coordinate such peer review activities; therefore be it
>
> **Resolved,** That the Medical Society of the State of New York urge all component societies to work actively either within, or at least in close coordination with, effective existing physician-controlled review organizations which show due concern for the patient as well as the physician; and be it further
>
> **Resolved,** That the MSSNY urge its component societies to move immediately to fill the void left by review organizations no longer operating; and be it further
>
> **Resolved,** That ongoing reports of such activities by local county medical societies be reported to MSSNY on a periodic basis (annually).

The resolution was sent to component county medical societies and they were asked to submit annual reports of their activities in this area. The membership was informed of the Council's action through the *News of New York* in the April 1, 1982, issue.

Physicians' Desk Reference. Resolution 81-49, *"Physicians' Desk Reference as Authoritative Reference in Medical Malpractice Suits"* (page 595), was amended and adopted by the House as amended. The resolved portions of amended Resolution 81-49 read as follows:

> **Resolved,** That the Medical Society of the State of New York examine the direct mail "package" marketing of the *Physicians' Desk Reference* to attorneys, and consider an appropriate response dissociating the Medical Society of the State of New York from the claim of the Medical Economics Company that, "For over 35 years, the *Physicians' Desk Reference* has been recognized by the medical profession as the most authoritative, most definitive reference source for information on drugs,"; and be it further
>
> **Resolved,** That the MSSNY examine the direct mail "package" marketing of the *Physicians' Desk Reference* to attorneys and consider if MSSNY wishes to disagree with the published claim of the Medical Economics Company that, "Product information in the

PDR. . . .constitutes a legal document under which a drug. . . .should be prescribed;" and be it further

Resolved, That this resolution be submitted to the American Medical Association.

At its meeting on November 12, 1981, the Council approved the recommendation of the Executive Committee that this resolution be referred to staff for further investigation prior to its implementation. The Chairman of the New York Delegation to the AMA was so informed, and on October 29, 1981, Resolution 81-49 was forwarded to J. Richard Burns, J.D., General Counsel, for examination of the facts stated in the first and second resolved, and to ascertain if appropriate responses dissociating the MSSNY from the marketing claims are indicated.

The following information was submitted by General Counsel to the Executive Committee at its meeting on December 16, 1981:

> The following article appeared in "The Citation, Vol. 44, No. 2 November 1, 1981," relative to *Physicians' Desk Reference* Not Liable to Consumer:
>
> "PHYSICIANS' DESK REFERENCE
> NOT LIABLE TO CONSUMER
>
> "The publisher of the *Physicians' Desk Reference* has no obligation to perform its own testing to verify information submitted to it by drug manufacturers, a federal trial court in New York ruled.
>
> "A patient who allegedly became addicted to Valium filed suit against the manufacturer and the publisher of the *PDR*. She claimed that the manufacturer was grossly negligent in publishing information on Valium furnished by the manufacturer without first performing its own independent tests on Valium.
>
> "On its motion to dismiss the action, the publisher argued that it was merely a conduit for the information and that it had no obligation to test the drug. It also contended that it could not be held liable for the patient's condition because it was not malicious, or reckless nor intended harm. Finally, it claimed that it had no duty under the First Amendment to test the drug.
>
> "Agreeing with the publisher's arguments, the trial court said that the descriptions of drugs carried in the *PDR* were advertisements. Libel and defamation cases decided by the U.S. Supreme Court held that a publisher was not liable for an advertisement unless the publisher showed reckless disregard for the truth. The publisher explicitly stated in the *PDR* that it published information furnished by manufacturers and did not advocate the use of any drugs. Moreover, the material published in the *PDR* was exactly the information approved for Valium by the Food and Drug Administration, the court said.
>
> "Since there was no allegation that the publisher knew of the addictive nature of Valium or acted in reckless disregard of the truth, the motion to dismiss was granted. — Libertelli v. Hoffman-LaRoche, Inc., Docket No. 80 Civ. 5626 (D.C., N.Y., Feb. 20, 1981)"

On December 11, 1981, General Counsel requested the publisher of the *PDR* to explain the basis for the statement that "for over 35 years the *Physicians' Desk Reference* has been recognized by the medical profession as the most authoritative, most definitive reference source for information on drugs."

The Council tabled implementation of Resolution 81-49 pending a response from the publisher of the *PDR*.

It was noted at the April 22, 1982, meeting of the Council that a booklet had been received from the publishers of the *PDR*. The report, entitled "*Sources of Prescribing Information — A Study Among a National Sample of Physicians*," presented the findings of a study based on personal interviews with 614 physicians. When asked, "What are the principal sources you use for prescribing information?", 70% of the physicians indicated the principal source as the *PDR*, 33% indicated experience/personal knowledge as the principal source, and 27% indicated that their principal source was journals and medical periodicals. The Council approved the submission of Resolution 81-49 by the New York Delegation for consideration by the AMA House of Delegates at its June, 1982, meeting.

On April 23, 1982, Resolution 81-49 was forwarded to the American Medical Association.

Neil L. Sutherland, Special Assistant to the Executive Vice President of the AMA, informed the MSSNY that the AMA Office of General Counsel has advised that the resolution would leave the AMA open to litigation for economic libel, since it disparages the product of a commercial firm.

The AMA requested that the New York Delegation withdraw the resolution. Dr. Clowe and Dr. Siegel agreed to withdraw the resolution.

A similar resolution, asking the AMA to inform the public that the *PDR* is not a standard of practice but one of a multitude of resources for practicing physicians, generated considerable discussion at the Annual Meeting of the AMA House of Delegates. The House referred the resolution to the Board of Trustees because of its medicolegal implications and asked the Board to evaluate the subject before any public statement is contemplated.

Physicians Lien Law. The House of Delegates adopted Resolution 81-24, "*Physicians Lien Law*" (page 557), which called upon the MSSNY to vigorously pursue the enactment of legislation to provide for a Lien Law in favor of physicians.

On October 29, 1981, the Chairman of the Committee on State Legislation was informed of the mandate of the House. In addition, the November 1, 1981, issue of the *News of New York* noted the action of the House.

In the report of the Committee on State Legislation to the Council on April 22, 1982, it was noted that Resolution 81-24 was reviewed by the Committee. Mr. Gerard Conway, MSSNY's Legislative Counsel, reported that Senator Johnson and Assemblyman Lentrol, sponsors of such legislation in the past, would be contacted to introduce a bill this year.

The Committee on State Legislation notes in its annual report that sponsors of similar legislation introduced in previous sessions were contacted and a draft proposal was submitted to them for introduction.

State Legislation Program for 1982 (page 552). The Reference Committee on Governmental Affairs and Legal

Matters recommended approval of the following State Legislation Program for 1982:

1. Medical Catastrophe Fund. (S.6977, Marchi; A.8806, Bianchi)
2. Malpractice Panel Bond. (A.1517, Nadler)
3. No-Fault Insurance Law Amendment. (S.1235-A, Marchi; A.3983-A, Connelly)
4. Professional Service Corporation Tax Law Amendments. (A.281, Robach; S.972, Pisani); (S.4810, Marchi; A.4490, Kremer)
5. Insurance Coverage for Emergency Medical Treatment in Physicians' Offices. (A.1855, Tallon)
6. Medical Society Involvement in Physician Discipline. (S.5177, Pisani)

The House amended the program to include opposition to: Workers' Compensation — Maximum Fee Schedule (S.7305, Engle), and approved the amended program.

On October 28, 1981, the Chairman of the Committee on State Legislation was informed of the action of the House.

In its annual report to the House, the Committee on State Legislation reports in detail on the status of the 1982 MSSNY State Legislation Program.

Search Committee for the Position of Executive Vice-President. Resolution 81-11, "*Search Committee for the Position of Executive Vice-President*" (page 539), called upon the Medical Society of the State of New York to establish a search committee for the position of Executive Vice-President, the members of such committee to include representatives of the House of Delegates, along with representatives of the Council, the Board of Trustees, and membership at large; that this search committee be appointed by the President forthwith; and that the search committee consider both physicians and nonphysicians in the selection of an Executive Vice-President.

On October 27, 1981, Milton Rosenberg, M.D., President of the Society, was advised of the action of the House. With the approval of the Council, Dr. Rosenberg appointed the following members to the Search Committee for the Position of Executive Vice-President:

John L. Clowe, M.D., *Chairman*
Charles N. Aswad, M.D.
George L. Collins, Jr., M.D.
Richard D. Eberle, M.D.
James M. Flanagan, M.D.
Samuel M. Gelfand, M.D.
Carl Goldmark, Jr., M.D.
Walter T. Heldmann, M.D.
Frederic W. Holcomb, Jr., M.D.
Morton Kurtz, M.D.
Bernard J. Pisani, M.D.
John A. Ramsdell, M.D.
William C. Stein, M.D.
Paul M. DeLuca, M.D., *Advisor*

In accordance with the decision of the Search Committee, advertisements were placed in the *New York State Journal of Medicine, Journal of the American Medical Association* (JAMA), and the *New York Times* of March 21st. In addition, the American Association of Medical Society Executives was contacted and informed.

As of July 1, 1982, the Committee had received over 130 applications and the most qualified individuals, both physicians and nonphysicians, were interviewed. (See annual report of the Search Committee).

Student Membership in County Medical Societies. Resolution 81-42, "*Student Membership in County Medical Societies*" (page 629), as amended by the Reference Committee on Scientific Activities, Publications, and Miscellaneous, was adopted by the House. Resolution 81-42 requested that the MSSNY encourage every component county medical society to provide for a student membership class.

On November 4, 1981, Presidents, Secretaries, and Executive Directors/Secretaries of component county medical societies were sent a copy of amended Resolution 81-42. It was noted that while this resolution encourages county medical societies to provide for a student membership class, Resolution 81-43 (page 631), which was referred to the House Committee on Bylaws and will be acted on by the House in 1982, calls for a change in the MSSNY Bylaws to mandate a student membership class in every county medical society.

Student Association of the State University (SASU). The House adopted Resolution 81-18, "*Opposition to Representation by the 'Student Association of the State University' of Students Enrolled in Programs of Medicine of the State University of New York*" (page 628). Resolution 81-18 requested the MSSNY, on behalf of its Medical Student Membership, to express opposition to the Board of Trustees of the State University of New York relative to the Student Association of the State University's assumed role as official representatives of SUNY students enrolled in its programs of medicine and to a mandatory SASU Activities Fee levied against SUNY enrolled medical students.

On November 4, 1981, Mr. Donald Blinken, Chairman of the Board of Trustees of the State University of New York was requested to give this matter careful consideration. In his reply on November 23, 1981, Mr. Blinken noted that the contents of the resolution were based upon the belief that some pending action within the University would require that monies derived from student activity fees be used to support SASU, and that was not the case.

Mr. Blinken further stated that SASU is an independent educational corporation, receiving its funds from membership dues paid by those campus student government associations which choose to become members. As with any membership organization, SASU can credibly purport to represent only those campus student government associations which elect to be members.

In the spring of 1981 SASU advocated to campus student associations that they conduct referenda to determine the extent of student support for membership in SASU. Because some persons appeared to have the impression that this process would be binding upon a campus student association and would result in a mandatory dues structure, the University issued a clarifying memorandum to all campuses. The following points of clarification are provided in the memorandum enclosed with the Chairman's letter:

"1. Supplemental referenda which are conducted by campus student associations to determine consituency support for funding specific activities are not required under the existing policy.
2. Furthermore, no Board of Trustee action has been taken to authorize a separate mandatory or voluntary fee to support specific student activities.
3. If such supplementary referenda are held in accordance with the Constitution and Bylaws of the student association, they may serve as a helpful gauge of student opinion as to the activities for which the activity fee itself will be directed.
4. The results of such referenda, however, are not binding, so a student association is under no obligation to comply with the referenda results under State University policy.
5. Should the Student Association determine that the named student activity categories which have been the subject of such referenda are to be funded, this funding must be included as an expenditure from the regular student association budget from monies collected in a single student activity fee.
6. The amounts related to these specific activities must not appear as a separate item on the student's bill."

Mr. Blinken hoped that the above information would provide the information needed to report to the membership of MSSNY on the resolution, and if, at some time in the future, a proposal should reach the Board of Trustees to require funding of any other organization external to the University through the mandatory activity fee, that proposal would be given careful consideration.

On January 8, 1982, a copy of Mr. Blinken's response was forwarded to Charles Cattano, Chairperson of the Medical Student Membership.

Tort Reform Coalition. The Reference Committee on Governmental Affairs and Legal Matters considered Resolution 81-51, "*Commission to Address Tort Reform*" (page 559), and Resolution 81-32, "*Formation of a Coalition to Preserve Quality Medical Care in New York State*" (page 560) together, and presented a substitute resolution for the consideration of the House.

The House adopted the following amended substitute resolution:

> **Resolved,** That the Medical Society of the State of New York formalize an ongoing coalition with members of business, industry, labor, consumer groups, hospitals, related health care industries, and others; and be it further
>
> **Resolved,** That this coalition function on a continuous basis to develop recommendations for tort reform and other legislative measures relating to the liability crisis and that the formation of this coalition be pursued with vigor as an effort of primary importance and that this effort include county medical societies.

The membership was informed of the actions of the House on November 1, 1981, through the *News of New York.*

In response to this substitute resolution Dr. Rosenberg contacted the Executive Director of the Association for California Tort Reform (ACTR) and requested information concerning the component organizations of ACTR, the mechanism of financing the coalition, whether the Association has a formalized set of Bylaws, and if they engage a full-time lobbyist or utilize the services of an outside firm.

On October 23, 1981, Dr. Rosenberg received a response from the Executive Director of ACTR, Edward K. Hamilton. Mr. Hamilton enclosed the Association's formal Articles of Incorporation and Bylaws, and a current list of their seventy-seven members. He informed Dr. Rosenberg that the Association is financed by annual donations from members (all members are contributors). Contributions range from $100 to $17,000, with the California Medical Association the largest single contributor. Contributions during the Third Program Year will total approximately $240,000.

The Association has no employees. All services are purchased through contracts. The major ones are a law firm and a lobbyist. The law firm provides executive direction, staff support to the Board, fund raising, research, and administrative support. The lawyer/lobbyist operates under the law firm's direction. Other contracts are made as necessary for bill drafting, auditing, *amicus* briefs, etc. The Board is unpaid, although expenses are theoretically reimbursable; Directors have not actually applied for reimbursement.

The major decision-making vehicle of the Association is a monthly Board meeting. One meeting per year is designated as the Annual Meeting, and any member who wishes is invited to attend. The Association maintains a Member Action Network by which members are signaled and coordinated in their approaches to legislators at strategic points in the consideration of bills. It also publishes a *Newsletter* for all members, as well as a series of *Case Bulletins* on recent landmark judicial decisions.

Mr. Hamilton enclosed a copy of the *Report of the California Citizens' Commission on Tort Reform*, a study group financed in large part by the California Medical Association, whose work preceded the formation of ACTR.

The basic substantive premises of ACTR are two:

— that it is the generic principles of the tort system (i.e., those that apply across the board to all areas of liability) that determine its basic character and cost benefit distribution profile.

— that no constituency concerned with any specialized liability area (e.g., medical liability, product liability) is strong enough to achieve any substantial degree of reform of these principles acting alone. Constituencies must be blended if the basics are to be offered.

Mr. Hamilton felt that the right blend is being achieved through ACTR, although a very entrenched and well-financed anti-reform group, led by the trial lawyers, provides formidable opposition to change. Six bills generally associated with ACTR have been enacted during the first three years of Association existence, three of them in 1981. Perhaps even more important, ACTR seems to have established the point that an important portion of society is very unhappy with the costs and inequities of the current system and is prepared to do the homework and fund-raising necessary to do something about it.

Dr. Rosenberg informed the Council in February that he had embarked on an attempt to form the coalition by contacting some of the groups mentioned in the resolution, and was singularly unsuccessful in receiving positive responses.

At the meeting of the Executive Committee on February 10, 1982, Dr. Siegel requested that the substitute resolution be reconsidered. The Executive Committee recommended, and the Council approved, that Dr. Siegel's request to reconsider the substitute resolution be tabled until the mandate of the House of Delegates has been brought to the attention of the Medicine/Business Coalition. The Medicine/Business Coalition will be asked if they are interested in expanding the group to discuss matters of mutual interest in health care.

The Medicine/Business Coalition of New York State reported to the Council on March 25, 1982, that Dr. Rosenberg had presented the substitute resolution to the Coalition at its meeting on March 3, 1982. The following conclusions were reached:

> The Medicine/Business Coalition of New York State has decided, for the present time, to remain as originally planned: namely a coalition of Business and Medicine.
>
> The Medicine/Business Coalition of New York State is interested in reviewing changes in Tort Law to ameliorate the medical liability problem.

In April of 1982, Richard D. Eberle, M.D., President-Elect, reported to the Executive Committee that he had attended a meeting of the Coalition on Medical Liability Tort Reform. The Coalition had been established at the instigation of several national associations, and it had been decided at several exploratory meetings that a concerted coalition-based effort would be the only successful venture to affect tort changes in the field of medical liability. Several states were considered, and it was decided that New York State was the most fertile field with one of the most acute problems of escalating premium rates due to rapidly increasing frequency and per case costs. Representatives of the following organizations were in attendance at this meeting: Alliance of American Insurers, American Insurance Association, Health Insurance Association of America, Blue Cross/Blue Shield of Greater New York, New York State Hospital Association, American Association of Neurological Surgeons, New York State Business Council, Medical Society of the State of New York, and the Onondaga County Medical Society.

After a review of the possible approaches to the medical liability cost problem and the Malpractice Fund Bill proposed by MSSNY, it was decided that: 1) The coalition would form a legislative and public relations subgroup to gather information for the purpose of formulating a communication to be sent to concerned individuals in the State; 2) a negotiating subgroup would also be formed, consisting of representatives of all the participating members of the coalition, to keep a cohesion of action from the coalition and to put an end to any rumors or misinformation that would come to individual representatives or interested groups; and 3) the base of the coalition would be broadened to include labor, consumer groups and others, interested or influential, for the main purpose of the coalition.

The Executive Committee agreed with Dr. Eberle's conclusion that this effort is extremely important and that the MSSNY should cooperate in this effort.

United Action on Behalf of Physicians and Their Patients. Resolution 81-2, "*Establishment of an Organization for United Action on Behalf of Physicians and Their Patients*" (page 561), called upon the Medical Society of the State of New York as a matter of extreme urgency, to investigate the establishment of an organization that would be empowered to lead the medical profession into united action to safeguard the interests both of physicians and their patients, even if such an organization has to be a union.

The House referred Resolution 81-2 to the Council. At its meeting on November 12, 1981, the Council tabled Resolution 81-2 in order for staff to investigate the legal and regulatory ramifications of this resolution.

The office of General Counsel presented a lengthy report relative to Resolution 81-2, to the Council at its meeting on December 17, 1981, and noted that this resolution calls for the urgent investigation of the establishment of an organization that could lead the medical profession into "united action" to safeguard the interests of physicians and patients. While it is not clear what is meant by the phrase "united action," apparently the term does not include such activities as petitioning governmental authorities, issuing policy statements on issues involving the delivery of health care, lobbying, and instituting litigation to protect the interests of the medical profession, since the Medical Society already may legally engage in these activities. What the Medical Society cannot do, without risking antitrust prosecution, is to lead the profession into boycotts or other types of collusive action. The writer of the resolution apparently believes that if another organization was created to represent the medical profession, and called itself a "union" or some other name, such organization could engage in boycotts or collusive activities to promote the interests of the medical profession without fear of antitrust prosecution. This belief is erroneous.

Generally, under the State and federal antitrust laws, the activities of bona fide unions involving wages and working conditions of employees are exempt from antitrust provisions. An organization of physicians, whose membership would predominantly consist of independent contractors, would not be accorded any immunity under antitrust provisions. Such organization would probably be subject to greater scrutiny, since there would be no apparent reason for its organization other than to circumvent antitrust provisions. Both under federal and State court decisions, efforts by associations of independent contractors to avoid antitrust prosecution by calling themselves "unions" have been futile.

General Counsel cited numerous statutes and court decisions which amply illustrated that if the Medical Society were to establish an organization to lead the medical profession into "united" (or collusive) action, and called such an organization a "union" or any other name, the Medical Society, the organization calling itself a union, and individual members of the organization would probably be subject to antitrust prosecution. Since most physicians are not employees, do not deal with an employer regarding wages, hours, and conditions of employment, any attempt to organize a "union" to represent the medical profession would be recognized as a sham.

The Council voted to disapprove Resolution 81-2 on the basis of this opinion, and it was recommended that a letter be sent to the Richmond County Medical Society explaining the positive actions of this Society in regard to the concerns expressed in the resolution.

On January 25, 1982, Dr. Siegel wrote to Orlando L. Manfredi, M.D., the President of the Richmond County Medical Society, enclosing General Counsel's memorandum which gave extensive legal precedent why the resolution should not be adopted, and he asked Dr. Manfredi to call this to the attention of his members.

In its annual report the Committee on Hospital and Professional Relations reports on its review of a study by the Pennsylvania Medical Society on union-like organizations. The Committee presented the following six recommendations to the Council:

1. Establish a program for negotiation services for those physicians that are either contractors or employees, or organized in groups as contractors or employees.
2. Investigate the possibility of starting a legal test case in reference to establishing negotiation potential for physicians signed up as paid-in-full participants on an individual contract bases, e.g., Blue Shield and Medicaid programs. The group in each program would be individually established as a unit for negotiating terms of their participation.
3. Implement research in the concept of offering negotiation services (requiring legal opinions). Conduct surveys to ascertain membership interest and comments in this type of service by MSSNY.
4. Fill the void in MSSNY's offerings of services to practicing physicians in the delivery of service in practice plans, groups, and as employees.
5. Offer residents/new physicians instructions on how to negotiate a contract with a medical facility, group, or other physicians.
6. Have the Legal Department render an opinion as to the legality of participating in such activities within the framework of the MSSNY Charter.

At its meeting on September 9, 1982, the Council considered recommendations 1-6 and voted to approve recommendation number 6. The Council instructed General Counsel to evaluate recommendations 1-5 and advise the Council as to the legal feasibility of implementing items 1-5.

Workers' Compensation. The House adopted Resolution 81-46, "*Regionalization of Workers' Compensation Fees*" (page 618), as amended by the Reference Committee on Medical Services. Amended Resolution 81-46 called upon the MSSNY to advocate the concept of usual, customary, and prevailing fees, and urge the abolishment of the zip code area designation.

On November 9, 1981, Mr. William Kroeger, Chairman of the Workers' Compensation Board, was sent a copy of Resolution 81-46. It was noted that the intent of this resolution is explicit and represents the official position of the MSSNY.

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⇒ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

⇒ Your reference Committee recommends that the Résumé of Instructions from the 1981 House of Delegates and Actions Thereon by the Council, Board of Trustees, Executive Committee, Officers, Council Committees, and Governmental Agencies be filed for information.

⇒ . . . *The Résumé of Instructions from the 1981 House of Delegates, and Actions Thereon by the Council, Board of Trustees, Executive Committee, Officers, Council Committees, and Governmental Agencies was* **FILED FOR INFORMATION** . . .

SEARCH COMMITTEE FOR THE POSITION OF EXECUTIVE VICE-PRESIDENT

To the House of Delegates, Ladies and Gentlemen:

The members of the Search Committee for the Position of Executive Vice-President are as follows:

John L. Clowe, M.D., *Chairman*	Schenectady
Charles N. Aswad, M.D.	Broome
George L. Collins, Jr., M.D.	Erie
Richard D. Eberle, M.D.	Onondaga
James M. Flanagan, M.D.	Wayne
Samuel M. Gelfand, M.D.	Nassau
Carl Goldmark, Jr., M.D.	New York
Walter T. Heldmann, M.D.	Richmond
Frederic W. Holcomb, M.D.	Ulster
Morton Kurtz, M.D.	Queens
Bernard J. Pisani, M.D.	New York
John A. Ramsdell, M.D.	Westchester
William C. Stein, M.D.	Niagara
Paul M. DeLuca, M.D., *Advisor*	Broome

The Committee was appointed by the President in January of 1982 in response to Resolution 81-11.

At its organizational meeting on February 10, 1982, the Committee reviewed the resolution and noted that the second resolved portion instructed the Search Committee to consider both physicians and nonphysicians in the selection of an Executive Vice-President. The Committee was informed that the contract of the present Executive Vice-President, Edward Siegel, M.D., would expire on December 31, 1983, and, therefore, the Committee would have approximately 18 months to select candidates and present its recommendations to the Council. There was general agreement that the person selected should be employed 6 months prior to the expiration of Dr. Siegel's contract to become familiar with the responsibilities of the position. A conclusion was reached to begin immediately to place advertisements in medical and nonmedical journals, i.e., *JAMA*, the *New York State Journal of Medicine*, to contact the American Association of Medical

Society Executives (AAMSE), the American Society of Association Executives (ASAE), and to submit an ad for publication in the Sunday edition of the *New York Times.*

A second meeting was held on May 20, 1982. The Committee discussed the methodology to be used in screening over one hundred applications received, and it was determined that each Committee member review a number of applications and select the most qualified individuals. Approximately twenty applications selected in the prescreening process were reviewed by the Committee as a whole. Of those twenty, seven were selected to be interviewed by the Committee. Guidelines prepared by the Ad Hoc Committee to Review the Job Description and Guidelines for the Appointment of Future Executive Vice-Presidents were discussed, and an evaluation form was developed for use during the interview process.

Two physicians and five nonphysicians were interviewed at meetings in June and July. The applicants' qualifications were carefully reviewed and the Committee members asked questions about their job knowledge and experience with medical societies and governmental agencies, their medical philosophy and management concepts. Additional applications were screened and two more physicians were granted interviews.

It is expected that the Search Committee will complete the interview process sometime in September and will interview a selected few for the second time during the month of October. The Committee's final recommendations will be presented to the Council for consideration.

Your Chairman expresses his appreciation to the members of the Committee for the considerable time and effort they have devoted to the work of the Committee.

Respectfully submitted,
John L. Clowe, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Search Committee be filed for information.

⟹ . . . *The report of the Search Committee was* **FILED FOR INFORMATION** . . .

AD HOC COMMITTEE TO REVIEW THE JOB DESCRIPTION AND GUIDELINES FOR THE APPOINTMENT OF FUTURE EXECUTIVE VICE-PRESIDENTS

To the House of Delegates, Ladies and Gentlemen:

The members of the Ad Hoc Committee to Review the Job Description and Guidelines for the Appointment of Future Executive Vice-Presidents are as follows:

Paul M. DeLuca, M.D., *Chairman*	Broome
Edgar P. Berry, M.D.	New York
Ralph S. Emerson, M.D.	Nassau

The Committee was established in January, 1980, with the directive to review the existing job description and to set up guidelines to be followed by the Council when appointing future Executive Vice-Presidents.

The Committee contacted various state medical associations requesting pertinent information in their Associations' Constitution and Bylaws and Rules and Regulations relative to the appointment and duties of their Associations' Chief Executive Officer. After reviewing the information received from thirty-six medical associations, the MSSNY Bylaws, and the guidelines formerly approved by the Council in 1978, the following guidelines were formulated and approved by the Committee:

EXECUTIVE VICE-PRESIDENT

MEDICAL SOCIETY OF THE STATE OF NEW YORK

The Executive Vice-President is the chief executive officer of MSSNY, answering to the president and the Council.

The Executive Vice-President shall act as general administrative officer and business manager of the Society and shall perform all administrative duties necessary and proper to the general management of the headquarters office, except those duties which are specifically imposed by the Bylaws upon the officers, councils, committees and other representatives of the Society. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

The Executive Vice-President is a member of all boards, committees, and commissions including the Board of Trustees, the Judicial Council, the House Committee on Bylaws, and the Nominating Committee, with voice but without vote.

The Executive Vice-President manages and directs the financial activities of the State Society.

He shall oversee the duties of the Secretary of the Society.

The Executive Vice-President shall appoint a Deputy Executive Vice-President, subject to the approval of the Council.

The Executive Vice-President attends meetings of committees, when possible, and is responsible for the day-to-day conduct of public relations with physicians, other societies, patients, and all those who through letters and telephone calls seek the assistance of the Society.

He shall perform such additional duties as may be required by the House of Delegates, the Council, or the President, and shall employ such assistants as the Council may direct. He shall serve at the pleasure of the Council, and in the event of his death, resignation, or removal, the Council, with the approval of the Board of Trustees shall have the power to fill the vacancy. From time to time, or as directed by the Council, he shall make written reports to the Council and House of Delegates concerning his activities and those of the headquarters office.

The chief executive officer of the Society is the Executive Vice-President, (who shall not necessarily be a physician) and a full-time employee of the Society. He shall be appointed by the Council and have the approval of the Board of Trustees. The Board of Trustees shall fix a salary which will be approved by the Council. He will be allowed travelling expenses. He will be bonded at the expense of the Society in such amounts as the Board of Trustees may require. All fringe benefits relating to the Executive Vice-President shall be reviewed and approved at least annually by the Board of Trustees.

He should be a person of stature in the community. He needs to be experienced in medical affairs, industrious, vigorous, and imaginative.

He should be on contract for three years, renewable in three- to five-year terms by the Council with the approval of the Board of Trustees, but with an equitable escape clause for use if necessary.

The Committee forwarded the above guidelines to the Search Committee for the Position of Executive Vice-President for its consideration.

The Chairman extends his thanks to the members of the committee for their cooperation.

Respectfully submitted,

Paul M. DeLuca, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Ad Hoc Committee to Review the Job Description and Guidelines for the Appointment of Future Executive Vice-Presidents be filed for information.

⟹ . . . *The report of the Ad Hoc Committee to Review the Job Description and Guidelines for the Appointment of Future Executive Vice-Presidents was* **FILED FOR INFORMATION** . . .

Resolution 82-4, Development of a National Health Policy

Introduced by John L. Clowe, M.D., as an Individual

Whereas, The American Medical Association is embarking on activities to develop a National Heatlh Policy; and

Whereas, A National Health Policy Steering Committee will be established to develop a set of basic principles and a health policy plan, with representatives of the AMA, specialty societies, the American Hospital Association, Blue Cross-Blue Shield, the American Dental Association, the Heatlh Insurance Association of America, representatives of the business community, including the Chamber of Commerce and the Business Roundtable, representatives of labor, government, and other organizations and groups; and

Whereas, State Medical Societies should be involved in the developmental process and should have the opportunity to review the basic principles and the health policy plan prior to implementation; therefore be it

Resolved, That the Medical Society of the State of New York recommend to the American Medical Association that quarterly reports of the National Health Policy Steering Committee be forwarded to all state medical societies for review and input; and be it further

Resolved, That, following distribution of the finalized set of basic principles and the health policy plan, the AMA House of Delegates will delay voting on the finalized document for a minimum of one year, allowing each state House of Delegates to properly review and debate the document, if it so desires.

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

The Reference Committee amended Resolution 82-4 by the addition of the following resolved:

Resolved, That the New York Delegation to the AMA be instructed to introduce a similar resolution at the Interim Meeting of the AMA House of Delegates in December, 1982.

⟹ Your reference committee recommends that Resolution 82-4 be adopted as amended.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-4 as* **AMENDED**. . .

Resolution 82-14, Days of the Convention

Introduced by Medical Society of the County of Kings, Inc.

Whereas, Attendance as delegate to the House of Delegates of the Medical Society of the State of New York is both an important privilege and duty; and

Whereas, Such attendance creates a hardship to both doctor and patient, especially for those physicians in solo practice; and

Whereas, This situation can be greatly ameliorated if the days of the convention were changed; therefore be it

Resolved, That the Medical Society of the State of New York begin the opening session of the House of Delegates on Friday evening, the reference committee hearings be held on Saturday, the second, third, and fourth sessions be held on Sunday and the closing session on Monday morning; and be it further

Resolved, That this change be instituted to take place beginning with the 1983 meeting of the House of Delegates.

PAST COUNCIL ACTION: Approval of future meeting dates for 1983-1986

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

Your reference committee notes that the Executive Vice-President indicated in his report that meeting dates for the House of Delegates and the CME Assembly have been confirmed through 1986, and tentative meeting dates have been arranged with the hotels for 1987, 1988, and 1989. The Society might encounter difficulties in changing these dates. It further notes that Article IV, Section 2, of the MSSNY Bylaws states that "the Council shall control arrangements for the annual convention of the Medical Society of the State of New York." It is, therefore, the committee's recommendation that this matter be referred to the Council.

⟹ Your reference committee recommends that Resolution 82-14 be referred to the Council.

⟹ . . . *The House voted to* **REFER** *Resolution 82-14 to the Council* . . .

Resolution 82-16, Change of the Name of the Section on Otolaryngology and Maxillofacial Surgery to the Section on Otolaryngology — Head and Neck Surgery

Introduced by Fouad B. Michael, M.D., Delegate, Section on Otolaryngology and Maxillofacial Surgery

Whereas, The American Board of Otolaryngology has changed its name to the American Board of Otolaryngology — Head and Neck Surgery; and

Whereas, The American Academy of Otolaryngology has accordingly changed its name to the American Academy of Otolaryngology — Head and Neck Surgery; and

Whereas, The New York State Society of Otolaryngology has changed its name to the New York State Society of Otolaryngology — Head and Neck Surgery, as advised by the House of Delegates in 1981; therefore be it

Resolved, That the Medical Society of the State of New York change the name of the Section on Otolaryngology and Maxillofacial Surgery to the Section on Otolaryngology — Head and Neck Surgery.

PAST HOUSE ACTION: Resolution 81-9

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⟹ *Report of the Reference Committee on Report of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

Your reference committee notes that the information contained in the first whereas of the resolution is not correct and, therefore, wishes to amend the first whereas to read as follows:

Whereas, The American Board of Otolaryngology has submitted a written request to the American Board of Medical Specialty Societies to change its name to the American Board of Otolaryngology — Head and Neck Surgery.

⟹ Your reference committee recommends that Resolution 82-16 be adopted as amended.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-16 as* **AMENDED** . . .

Resolution 82-31, Bi-Annual Payment of AMA Membership Dues

Introduced by Morton M. Safran, M.D., as an Individual

Whereas, Dues for the American Medical Association, Medical Society of the State of New York, county medical societies, and specialty societies have reached a sizeable sum of money; and

Whereas, Membership in the AMA has declined in New York; and

Whereas, Consideration should be given to helping the AMA increase its membership from New York; therefore be it

Resolved, That the Medical Society of the State of New York request the American Medical Association to develop a system which would allow for bi-annual payment of AMA dues; the first half to be paid with State and county dues; the second half to be paid directly to the AMA, approximately six months later or by another method chosen by the AMA; and be it further

Resolved, That this resolution be submitted by the New York Delegation at the Interim Meeting of the AMA in December, 1982.

■

⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

Your reference committee feels that the complexity and cost on an installment dues system would add to the overall operating complexity and cost and might lead to a dues increase. It also notes that this matter is presently under consideration by the AMA.

⟹ Your reference committee recommends that Resolution 82-31 not be adopted.

⟹ . . . *The House after discussion, voted to* **NOT ADOPT** *Resolution 82-31* . . .

Resolution 82-46, To Create an Ad Hoc Committee to Determine if the People of New York State Can Continue to Afford the Medical Care They Are Receiving

Introduced by Leo J. Swirsky, M.D., as an Individual

Whereas, We all know that superior medical care is being given to the people of New York State; and

Whereas, We and other health professionals know that the cost of health care in New York State and elsewhere is rapidly climbing beyond the ability of people to pay for it; and

Whereas, We all know that there is no one answer and no one cause although everyone, including Governor Carey and Lieutenant Governor Cuomo, but not the New York State Legislature, recognizes the direct relationship between the cost of malpractice insurance and the cost of medical care and its specific escalating effect; and

Whereas, The current problem of the asbestos industry, and its liability insurance, proves the fallacy of claims-made insurance coverage; therefore be it

Resolved, That since the liability problem affects all facets of economic life in New York State, the Medical Society of the State of New York form an ad hoc committee to contact all large and small business associations, all workers (union and nonunion), economists, accountants, actuaries, all representatives of patients in all economic strata, to discuss this problem and to bring into the open in frank discussion a collective consensus and hopefully a start toward solving an important and economically imperative problem. The contacts are to be made by telephone, letter, newspaper ads or any device the ad hoc committee deems advisable. The information gained could be used to convince the Legislature that it is imperative that a solution to the medical liability crisis must be found which will benefit all the people of New York State.

Fiscal Note: $5,000

PAST HOUSE ACTION: Substitute Resolution for Resolutions 81-51 and 81-32

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

Your reference committee feels that this resolution is vague and the intent of the resolution is being addressed by MSSNY's efforts through the Medicine/Business Coalition and the newly formed Medical Liability Reform Coalition.

⟹ Your reference committee recommends that Resolution 82-46 not be adopted.

⟹ . . . *The House, after discussion, voted to* **NOT ADOPT** *Resolution 82-46* . . .

Resolution 82-68, Support of Coalition Efforts to Ameliorate the Medical Liability Crisis

Introduced by Section on Neurosurgery

Whereas, The medical liability problem continues to be a major obstacle to quality medical care in this State; and

Whereas, This liability problem adversely affects professional and industrial groups not directly involved in the practice of medicine; and

Whereas, Promising efforts have been made to enlist these other groups in the fight for medical liability reform; and

Whereas, The Neurosurgical Section of the Medical Society of the State of New York represents a specialty suffering acutely from this problem and is thus stimulated to offer its various resources toward its solution; therefore be it

Resolved, That the Medical Society of the State of New York make the coalition effort to ameliorate the medical liability crisis its primary objective for the coming year, sparing neither time, effort, nor money to accomplish this.

Fiscal Note: $100,000

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⟹ *Report of the Reference Committee on Reports of Officers:* The following report was presented by David M. Benford, M.D., *Chairman.*

Your reference committee feels that the Society is strongly committed to coalition efforts as evidenced by its involvement with the Medicine/Business Coalition and the Medical Liability Reform Coalition. It is carrying out the mandate of the 1981 House in accordance with amended substitute resolution for Resolution 81-51 and Resolution 81-32, which called on the Society to formalize an ongoing coalition to develop recommendations for tort reform and other legislative measures relating to the liability crisis.

⟹ Your reference committee recommends that Resolution 82-68 not be adopted.

⟹ . . . *The House, after discussion, voted to* **REFER** *Resolution 82-68 to the Council* . . .

SCIENTIFIC ACTIVITIES, PUBLICATIONS, AND MISCELLANEOUS

ADMINISTRATIVE COMMITTEE FOR THE MSSNY PENSION PROGRAM

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee for the Medical Society of the State of New York Pension Program are:

G. Rehmi Denton, M.D., *Chairman*	Albany
Ralph S. Emerson, M.D.	Nassau
Henry I. Fineberg, M.D.	Suffolk
Robert M. George, M.D.	Oneida
Edward Siegel, M.D.	Clinton

The Chairman is pleased to report that the overall assets of the Medical Society of the State of New York physicians' sponsored Pension Program increased over $1,500,000, to a total of approximately $2,700,000 in the HR-10, Corporate Pension and IRA Programs.

During the past year, the Medical Society of the State of New York replaced Chemical Bank as the Trustee for our program, with the Long Island Trust Company. The decision on the part of Chemical Bank to withdraw as Trustee in our pension program reflected a change in their corporate philosophy, and is in no way criticism of our program. Chemical Bank is withdrawing as Trustee from all similar programs. The fees that the Long Island Trust Company will charge are comparable to those that we paid Chemical Bank.

Your chairman would like to thank the members of the Committee and staff for the time and energy they devoted to committee activities.

Respectfully submitted,
G. Rehmi Denton, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Scientific Activities, Publications, and Miscellaneous:* The following report was presented by Charles R. Salamone, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Administrative Committee for the MSSNY Pension Program be filed for information.

⟹ . . . *The report of the Administrative Committee for the MSSNY Pension Program was* **FILED FOR INFORMATION** . . .

ADVISORY COMMITTEE TO THE AMERICAN ASSOCIATION OF MEDICAL ASSISTANTS, NEW YORK STATE SOCIETY, INC.

To the House of Delegates, Ladies and Gentlemen:

The members of the Advisory Committee to the American Association of Medical Assistants, New York State Society, Inc., are as follows:

Anthony F. Fragola, M.D., *Chairman*	Suffolk
Sheppard Arluck, M.D.	Livingston
Charles Poskanzer, M.D.	Albany

The following is a résumé of the activities of the New York State Society — American Association of Medical Assistants:

During September, 1981, the National House of Delegates of AAMA raised the dues from twenty-five dollars ($25) to forty-five dollars ($45). This action resulted in the loss of some renewal memberships during 1982, throughout New York State. Two chapters seceded because medical assistants could not afford to pay dues of forty-five dollars ($45) National, twelve dollars ($12) State, two ($2) to five dollars ($5) local. This adds up to a total of fifty-nine ($59) to sixty-two dollars ($62) annually. The overall loss was over three hundred members.

Personally, I would like to make a very strong suggestion that physicians subsidize their assistants by paying said dues. The AAMA is of inestimable value to the physician because of the several educational programs which improve the qualifications of the medical secretary or clinical assistant.

In November, 1981, there were sponsored seminars on medical-legal subjects, in Albany and Westbury. Approximate attendance at each was one hundred fifty.

In April, 1982, the State Convention of the AAMA was held in Westbury; this was attended by approximately four hundred members. Seminars of interest to the members were held on various subjects and the election of new officers also took place, as follows: President, Janice Parish-Caplan, CMA-A (Suffolk), President Elect, Barbara Johnston (Onondaga), Vice-President, Eleanor Kramarchyk, CMA (Albany), Secretary, Bernadette Cherry (Kings), Treasurer, Kathryn Stewart, CMA-AC (Saratoga), Speaker, Rita Kearney, LPN,CMA (Monroe), and Vice Speaker, Shirley Tangredi, RN,CMA (Monroe).

In May of 1982 there was a mass mailing in support of the State Medical Society's stand on the Catastrophic Fund Bill.

During the coming year the NYSS-AAMA intends to take a more active stand on legislation, working through the legislative arm of the State Medical Society and also by direct contact with legislators throughout the State. The plan is to strongly support the Medical Society on all health care issues.

The New York State Society AAMA will be hosting the National AAMA Convention at the Sheraton Centre during October 10 through 14, 1983. The AMA is in need of and would greatly appreciate the help of the New York State Medical Society. Convention Chairman is:

Joyce Maier, RN,CMA and Vice Chairmen are: Eleanor Kramarchyk, RN, CMA, and Janice Parish-Caplan, CMA-A.

Respectfully submitted,

Anthony F. Fragola, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Scientific Activities, Publications, and Miscellaneous:* The following report was presented by Charles R. Salamone, M.D., *Chairman.*
⟹ Your reference committee recommends that the report of the Advisory Committee to the American Association of Medical Assistants, New York State Society, Inc., be filed for information.
⟹ . . . *The report of the Advisory Committee to the American Association of Medical Assistants, New York State Society, Inc., was* **FILED FOR INFORMATION** . . .

AWARDS AND PRIZE ESSAYS

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Awards and Prize Essays are as follows:

Aaron Feder, M.D., *Chairman*	Queens
Alfred A. Angrist, M.D.	Queens
John T. Ellis, M.D.	New York
Milton Gordon, M.D.	Suffolk

The Committee discussed the establishment of guidelines for the selection of recipients of the Albert H. Douglas, M.D., Memorial Award for Excellence in Clinical Teaching. The qualities the award seeks to recognize are those of clinicians in all areas of medicine, who are outstanding medical educators.

It was agreed that a letter be sent to deans of medical schools in New York State apprising them of this award, and requesting their assistance in obtaining nominations from the medical student body, graduate student body, and faculty. In addition, notices were sent to deans for distribution and posting, and an announcement of the award was published in the *New York State Journal of Medicine* and *News of New York*, publicizing the award and its intent, and requesting that nominations, together with substantiating material, be submitted to the awards committee for selection of the recipient.

Requests for nominations for the Albion O. Bernstein, M.D., Award, given to a physician, surgeon, or scientist who recently made a widely beneficial scientific discovery in medicine, surgery, or the prevention of disease, were sent to organizations of medical interest.

The nominations for these two awards are under consideration by the members of the Committee on Awards and Prize Essays, and the candidates selected will be presented with the awards at the Annual Meeting of the House of Delegates, November 7-10, 1982.

Your Chairman wishes to express his appreciation to the other members of the Committee for the time and effort they so willingly gave in the discharge of our duties. He wishes to pay special tribute to Dr. Alfred Angrist, his predecessor Chairman, for his guidance and counsel, and for his valued participation as a Committee member during the past year.

Respectfully submitted,

Aaron Feder, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Scientific Activities, Publications, and Miscellaneous:* The following report was presented by Charles R. Salamone, M.D., *Chairman.*
⟹ Your Reference Committee recommends that the report of the Committee on Awards and Prize Essays be filed for information.
⟹ . . . *The report of the Committee on Awards and Prize Essays was* **FILED FOR INFORMATION** . . .

FOREIGN MEDICAL GRADUATES

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Foreign Medical Graduates are as follows:

Jesus Cheda, M.D., *Chairman*	New York
Kavasseri S. Agneshwar, M.D.	Broome
Jaswant S. Bal, M.D.	Onondaga
Khalid Rashid Bhatti, M.D.	Rensselaer
Glenda D. Donoghue, M.D.	Erie
Larry J. Greenberg, M.D.	Warren
Nicetas Kuo, M.D.	Queens
Dattatraya Lanjewar, M.D.	Bronx
Shashi Sharma, M.D.	Monroe
Michael Sierp, M.D.	Westchester
Kareem Tannous, M.D.	Nassau
Bernard J. Pisani, M.D., *Advisor*	New York

The Committee held its first meeting on June 30, 1982, at which time Milton Rosenberg, M.D., President of the Medical Society of the State of New York, charged it with identifying the special, professional needs of foreign medical graduates and to advise MSSNY on how to serve those needs.

Toward these ends, the Committee agreed to:

1) Solicit input from individual foreign medical graduates;

2) Establish dialogues with the various ethnic medical organizations;

3) Explore the possibility of obtaining an Educational Commission for Foreign Medical Graduates (ECFMG) grant to fund such specific efforts as analyzing the composition and distribution of FMGs in New York State; offering free or low-cost English language workshops; producing a Statewide newsletter for FMGs; and establishing a placement service for FMGs.

Respectfully submitted,

Jesus Cheda, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Scientific Activities, Publications, and Miscellaneous:* The following report was presented by Charles R. Salamone, M.D., *Chairman.*
⟹ Your reference committee recommends that the report of the Committee on Foreign Medical Graduates be filed for information.
⟹ . . . *The report of the Committee on Foreign Medical Graduates was* **FILED FOR INFORMATION** . . .

GENERAL INSURANCE

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on General Insurance are as follows:

Robert M. George, M.D., *Chairman*	Oneida
Renzo Basili, M.D.	Kings
Maurice J. Elder, M.D.	St. Lawrence
Kenneth B. Levites, M.D.	Suffolk
John Alan Ramsdell, M.D.	Westchester
William C. Stein, M.D.	Niagara
Kenneth W. Woodward, M.D.	Monroe

The Committee on General Insurance is pleased to report that approximately 9,814 policies have been issued insuring our physician members, their dependents, and key employees who have enrolled in the Medical Society of the State of New York Supplemental Insurance Programs. The programs consist of Group Life, Disability Income, Professional Overhead Expense, In-Hospital Indemnity, and Accidental Death and Dismemberment. Participation increased in all plans this past year. All of our group life and health insurance programs feature a special renewal guarantee.

Since the inception of our General Insurance programs in 1974, over $10,000,000 in benefits have been paid to our physician members, their families, and key employees. Over $500,000 in dividends have been paid to our physician members insured under our Group Life Insurance plan.

We have been advised that a projected group life dividend of approximately 41.8% for a total of $230,814 will probably be paid this year to the participating physician members in our Group Life Insurance program.

The maximum monthly protection available under our Supplemental Professional Office Overhead program was increased to $2,500 per month ($5,000 per month in all Continental Insurance Company Programs). Our Supplemental In-Hospital Indemnity Plan was improved with an increase in the maximum protection to $100 per day in coverage. The rate structure of our Accidental Death and Dismemberment program was reduced by approximately 13%, applying to all current Accidental Death and Dismemberment contracts, and new policies in our program.

The excess earned premium over paid and incurred losses for all State-sponsored Continental Insurance Company programs from inception to December 31, 1981, is $2,527,850.

Hundreds of insured physicians have written letters to the Medical Society of the State of New York which compliment the excellent benefit payments they have received.

A comprehensive multi-peril office package which was specially designed for the Medical Society of the State of New York was implemented. Thus far, over 2,300 physician members have expressed an interest in this program.

The General Insurance Committee and staff continue to explore and review other forms of insurance for the personal and professional needs of our physician members. These include a Disability Benefits Law Insurance Program, a Comprehensive Major Medical Plan, a Medicare Supplement, a Dental Program, and Group Auto and Homeowners Insurance. It should be noted that the underwriting market for some of these proposed programs is limited, due to the adverse experience of the underwriting companies.

The General Insurance Committee and staff continue to study the feasibility of administering some aspects of our General Insurance Program.

Your chairman would like to thank the members of the Committee for the time and energy they devoted to committee activities.

In addition, I would like to thank Bernard M. Jackson, CLU, Director of the Division of Insurance and Membership Benefits, and his secretary, Mrs. Sylvia Frank, for their able staff assistance.

Respectfully submitted,

Robert M. George, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Scientific Activities, Publications, and Miscellaneous:* The following report was presented by Charles R. Salamone, M.D., *Chairman.*
⟹ Your reference committee recommends that the report of the Committee on General Insurance be filed for information.
⟹ . . . *The report of the Committee on General Insurance was* **FILED FOR INFORMATION** . . .

Subsequent to a discussion on the floor, your reference committee recommends that the Medical Society of the State of New York strive to explore all insurance programs that might be available to members beyond the age of seventy. Your reference committee recommends approval of the above recommendation.
⟹ . . . *The House voted to* **APPROVE** *the recommendation of the reference committee* . . .

LIBRARY AND ARCHIVES

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Library and Archives are as follows:

Albert M. Schwartz, M.D., *Chairman*	New York
Eliza H. Caldwell, M.D.	Westchester
Marks G. Jacoby, M.D.	Suffolk
Albert Lowenfels, M.D.	Westchester
Harriet Northrup, M.D.	Chautauqua
* Stuart Wachter	Bronx

The Committee on Library and Archives of the Medical

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* Medical student

Society of the State of New York met on September 15, 1982. The following matters were discussed:

The activities, statistics, and acquisition policies of the library were reviewed. The Committee agreed that those books that are donated to the library but are not suitable for inclusion in the collection, be given to a library that can utilize them and that in turn would assist our library with material it needs but does not own. The lack of utilization of the library was also discussed. The Committee concluded that the library is an important source for unique kind of information in the health care field which is hard to find; therefore, for the benefit of the members and the profession, its utilization should be promoted by publicizing its resources and services.

The status of our archives was reported on and the establishment of an on-going program and the formulation of appropriate policies were discussed. To proceed with the development of an archival program, basic issues have to be resolved. First among them: should the ownership of our archives be transferred to an institution with an established archival depository or should ownership be retained by the Society and the material be placed only on permanent deposit with such an institution? The Committee recommended, and the Council at its meeting on October 7, 1982, approved that the ownership of the archival documents of the Society be transferred to an institution which has an established and functioning archival depository, with proper legal agreements drawn up to safeguard the interest of the Society. The Committee also recommended, and the Council at the same meeting approved, that the initial cost of the transfer and of the setting up of the archival collection be covered from the accumulated proceeds of the Bernstein Fund to the sum of approximately $5,000.00 and that the subsequent costs of upkeep be borne by the Society. The Committee also felt that discussions with several institutions which have established and functioning archival depositories be initiated, and the one offering the best possibilities to the Society in terms of access, upkeep and costs be selected as the archival depository for the Society's records.

Respectfully submitted,

Albert M. Schwartz, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Scientific Activities, Publications, and Miscellaneous:* The following report was presented by Charles R. Salamone, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Library and Archives be filed for information.

⟹ . . . *The report of the Committee on Library and Archives was* **FILED FOR INFORMATION** . . .

MEMBERSHIP BENEFITS

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Membership Benefits are as follows:

John G. Hamilton, M.D., *Chairman*	Monroe
Kenneth Ho, M.D.	Onondaga
Karl Neumann, M.D.	Queens
Richard Petrillo, M.D.	Westchester
Perry Robins, M.D.	New York
Thomas J. Sheehy, Jr., M.D.	Nassau

The theme "Membership Pays, It Does Not Cost" continued to be developed and expanded by the Membership Benefits Committee and the Division of Insurance and Membership Benefits. New benefit programs, including a sophisticated accounting system, a discount program for certain medical text books, rare coins purchased through an approved numismatic organization at special prices, were reviewed by staff and the Membership Benefits Committee referred them to the Council for approval. In addition, a travel program to London, England, satisfying all Category 1 Continuing Medical Education Credits was planned for our physician members and their spouses.

The Membership Benefits Committee has recommended and Council has approved a survey of our membership to determine the interest in forming a Federal Credit Union for the Medical Society of the State of New York.

The Director of the Division of Insurance and Membership Benefits is exploring the possibility of publishing a Physician Benefits Magazine, paid for by the various approved vendors of membership benefits and other commercial enterprises.

Periodic seminars are being held for the benefit of our physician members on subjects ranging from pension programming and financial analysis to the use of computers in medical practice.

Thousands of requests from our physician members, both written and telephoned, are serviced annually in a highly professional manner.

An analysis of these requests show the most popular programs to be purchasing and leasing cars at group discounts, major appliances at wholesale prices, and our Group Insurance Programs.

Your chairman would like to thank the members of the Committee for the time and energy they devoted to committee activities.

In addition, I would like to thank Bernard M. Jackson, CLU, Director of the Division of Insurance and Membership Benefits, and his secretary, Mrs. Sylvia Frank, for their able staff assistance.

Respectfully submitted,

John G. Hamilton, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Scientific Activities, Publications, and Miscellaneous:* The following report was presented by Charles R. Salamone, M.D., *Chairman.*

Your reference committee commends the Committee on Membership Benefits for the development of an outstanding membership program kit which is distributed to new members and is available in the lobby adjacent to the House of Delegates.

⟹ Your reference committee recommends that the report of the Committee on Membership Benefits be filed for information.

⟹ . . . *The report of the Committee on Membership Benefits was* **FILED FOR INFORMATION** . . .

PUBLICATIONS

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Publications are as follows:

Milton Gordon, M.D., *Chairman*	Suffolk
Arthur H. Diedrick, M.D.	Westchester
A. W. Martin Marino, Jr., M.D.	Kings
Richard B. Nolan, M.D.	New York
John T. Prior, M.D.	Onondaga
Alfred A. Angrist, M.D., *Advisor*	Queens
Julius E. Stolfi, M.D., *Advisor*	Kings

The policy of the *New York State Journal of Medicine* is to continue to keep physicians abreast of the changes and advances in medicine, particularly with respect to disease mechanisms and therapeutic approaches to diagnosis and treatment.

Goals and objectives of the *New York State Journal of Medicine* are —

1. To publish a scientific and clinical *Journal* that is representative of all major medical disciplines.
2. To enable the practicing physician to be well informed in every aspect of medicine, including areas of special interest — medical-legal observations, ethical issues relative to the physician-patient relationship, socioeconomic aspects of medicine relating to Medicare, Medicaid programs, malpractice insurance, and legislative and public health issues.
3. To force a debate on controversial issues that affect the quality of medical practice.
4. To publish trends in medicine; i.e., investigative, clinical, ethical, and research, and to promote support for appropriate advertising.
5. To improve the health of the people of New York State by elevating standards of medical care and disease prevention and to provide information to informed physicians.
6. To fulfill its social responsibility, in addition to its direct responsibility to its subscribers, the membership.
7. To demonstrate that a *Journal* can be created that will be financially sound to the MSSNY.

The *Journal* has a very real educational value.

At its meeting on May 7, 1982, the Publications Committee was of the opinion that articles covering the use of computers in medicine would be of great benefit to the readership, and that the *Journal* should act as a clearinghouse for this information. It was also agreed that correlation conferences in radiology and pathology should be submitted by the various New York medical schools rather than just one medical school, as has been the procedure in the past. The Committee approved that a dental series covering dental progress and recent advances in dental surgery be initiated.

The Committee noted that some members of the Associate Editorial Board are inactive, and a reorganization of the Board would be in order. Members of the Board were advised of the following guidelines concerning their responsibilities, and requested to inform the editor of their acceptance of these guidelines:

1. Prompt and thorough review of articles within two to four weeks after receipt.
2. Write one review article during his and/or her period of appointment to the Board.
3. Write short commentaries on articles reviewed, if you believe the article to be important.
4. Write or recruit articles for submission to the *New York State Journal of Medicine.*
5. Submit ideas for improvements in the *New York State Journal of Medicine.*
6. Feel free to submit criticisms of policies or individual articles in the *Journal.*
7. Send names of individuals whom you think would be good reviewers.
8. Notify the *Journal* office of your vacation period or of any long trips planned.
9. Occasionally contribute material to be used as "fillers" in the *Journal.*

The Committee reviewed the recommendations approved by the House of Delegates in 1981 concerning the future policy and the financial considerations of the *Journal.* The matter of Dr. Angrist's retirement as editor of the *Journal,* and his successor, was discussed. It is anticipated that proposals relative to future policy of the *Journal* will be considered and acted upon by the new editor when he assumes this position.

In response to the recommendation of the House of Delegates that a fiscal note be appended by administration to future annual reports of the Publications Committee, the following are the figures promulgated for the year 1981:

Figure 1.

NEW YORK STATE JOURNAL OF MEDICINE
1981 PRODUCTION COSTS

EXPENSES:		
Direct Journal Cost	$556,691	
Direct Advertising Cost	65,158	
Total Production Cost		$621,849
INCOME:		
Advertising Income	$145,469	
Reprint Income	12,606	
Journal Subscription Income	6,146	
Total Income		$164,221
Net: 1981 Journal Production Costs		$457,628

Explanation of the 1981 Production Costs (Figure 1.) Direct *Journal* costs include composition, printing, paper, postage, and editorial department salaries. Direct advertising costs include advertising agency commissions, advertising salesmen commissions, and half-time salaries of two employees in the Division of Advertising Sales and Meeting Services. It should be noted that the $164,221 income does not include the $3.50 per member allocated to the *Journal* out of membership dues, (same as the subscription price) and that 4,343 life members receive the *Journal* free of charge.

Based on an average of 27,500 copies printed per issue, at a cost of $35,200 (including salaries), the cost per copy was $1.28. The annual subscription rate was $3.50 for 13 issues. There were approximately 1,285 paid subscribers.

Figure 2.

EDITORIAL ADVERTISING RATIO

1981	Issue Pages	Editorial Pages	Advertising Pages	Ratio Editorial/ Advertising
13 issues	1,968*	1,696	301	82/18

* The issue page count does not include printed inserts furnished by the advertiser.

The editorial/advertising ratio was 82% editorial and 18% advertising pages.

Figure 3.

NEW YORK STATE JOURNAL OF MEDICINE
PRODUCTION COSTS JANUARY TO JUNE 1982

EXPENSES:		
Direct Journal Cost	$301,947	
Direct Advertising Cost	45,459	
Total Journal Production Cost		$347,406
INCOME:		
Advertising Income	$125,173	
Reprint Income	6,040	
Journal Subscription Income	5,724	
Total Income		$136,937
Net: Journal Production Costs (January — June, 1982)		$210,469

For the first six months of 1982 there were 176 pages of paid advertising as compared to 122 pages for the same period in 1981. This is an increase of 54 advertising pages.

As of January, 1982, printing costs increased by 9.2% over 1981. At the same time, the advertising rates were increased by 15%. The annual subscription rate for the *Journal* was also increased by 17.5% to $10.00.

Of the 1,285 paid subscribers to the *Journal*, there were 237 foreign university and hospital libraries, 45 Canadian, 412 New York State, and 591 out-of-state subscribers.

Our exchange program comprises 85 foreign publications and 112 domestic publications. The *New York State Journal of Medicine* is read worldwide.

SUMMARY

The Publications Committee and the *Journal* staff are aware of the concern of membership over the increasing costs of producing the Journal. Over the past two years, advertising income was down in the *New York State Journal of Medicine* as well as in other state journals. We are happy to report that this trend is changing. For the first six months of 1982, the editorial/advertising ratio was 76% editorial and 24% advertising pages. An increase of 54 pages of advertising has increased the billings by $44,100 over the amount for the same period in 1981. This is a 55% increase in the number of advertising pages for the first six months of 1982. By comparison, many other state journals show a decrease in advertising pages in 1982.

If the current trend in increased advertising pages continues through 1982, the *New York State Journal of Medicine* deficit will be reduced considerably in 1982. In addition, every effort is being made to trim costs wherever possible.

A review of other state medical journals, to assist in evaluating the *New York State Journal of Medicine*, reveals that most other journals publish fewer pages, less scientific and clinical articles, and more socioeconomic information. The state medical journal most similar to the *New York State Journal of Medicine*, although a regional journal representing seven state medical societies (California, Idaho, Nevada, New Mexico, Utah, Washington, and Wyoming) is the *Western Journal of Medicine*.

As with the *New York State Journal of Medicine*, the *Western Journal of Medicine* publishes scientific articles and case reports of clinical significance, special medical/legal and socioeconomic articles, important advances in clinical medicine and public health, CME activities, book reviews and listing of books received, obituary notices and classified advertising. Other similarities include the method of processing manuscripts, peer review, and "limbo" or "holdover" articles.

A comparison of the two journals for the first six months of 1982 reveals that the *New York State Journal of Medicine* received 244 new articles to be considered for publication, and rejected 80, a rejection rate of approximately 30-35%. The *Western Journal of Medicine* received 190 new articles and rejected 92, a rejection rate of approximately 45-50%.

A recent survey of the *New York State Journal of Medicine* of the number of manuscripts received, and the institutions from which they originated, indicates that the quality of manuscripts submitted to the *Journal* has not diminished. A comparison of the years 1973 to 1981 and the first six months of 1982 reveals that the number of manuscripts has increased from 459 to 483 in 1981 and 244 in 1982, and that the number of requests from foreign countries, particularly Russia, for abstracts, has increased from 4 requests in 1978 to 40 requests in 1981.

Manuscripts, since 1973, continued to be submitted by major teaching institutions, health departments, treatment centers, and clinical hospitals throughout the State. We have also continued to receive manuscripts from authors throughout the United States; from bordering States; i.e., Connecticut, New Jersey, Pennsylvania, and Delaware; and from California, Wisconsin and states throughout the West and Midwest. Manuscripts are also submitted by authors from foreign countries; i.e., Canada, China, Turkey, Nigeria, and Mexico.

Of the 483 manuscripts received in 1981, 290 were published, 24 were withdrawn by the author, 135 were not accepted for publication, and 34 are in "limbo" awaiting publication. Of the 244 manuscripts received for the first six months of 1982, 36 were published, 80 manuscripts were not accepted, 5 were withdrawn by the author, 12 are out for peer review and revision, and 111 are awaiting publication. Appendix "A" indicates the specialty and subspecialty content for the articles submitted to the Journal in 1981-1982.

The number of months involved in evaluating and processing a manuscript for publication varies within a limited time range of three to seven months. The variables involved are dependent on the length of time a consultant peer reviewer takes to evaluate and return the article, the amount of time it takes for an author to accommodate modifications or revisions, and whether or not the copyright permission accompanies the article.

A manuscript is judged, accepted, and rated by the following process: (A) It is given a chronological number and turned over to the editor or associate editor. At this time it is accepted, rejected, or accepted with modification. If not within the editor or associate editor's particular area of expertise, an outside consultant/reviewer, someone on the Associate Editorial Board, or an authority in the given field, is recommended. (B) Each article sent to a consultant is accompanied by a cover letter and review sheet for comment. (C) Manuscripts accompanied by the comment of the consultant are accepted officially by the editor or associate editor and processed into production, depending upon the comment(s). Highly praised, or considered to be timely or superior articles, are published in the next scheduled issue. (D) Publication sequence is dependent on the following variables: (1) date manuscript is received by the *Journal;* and (2) whether or not reviewer has indicated priority and quality.

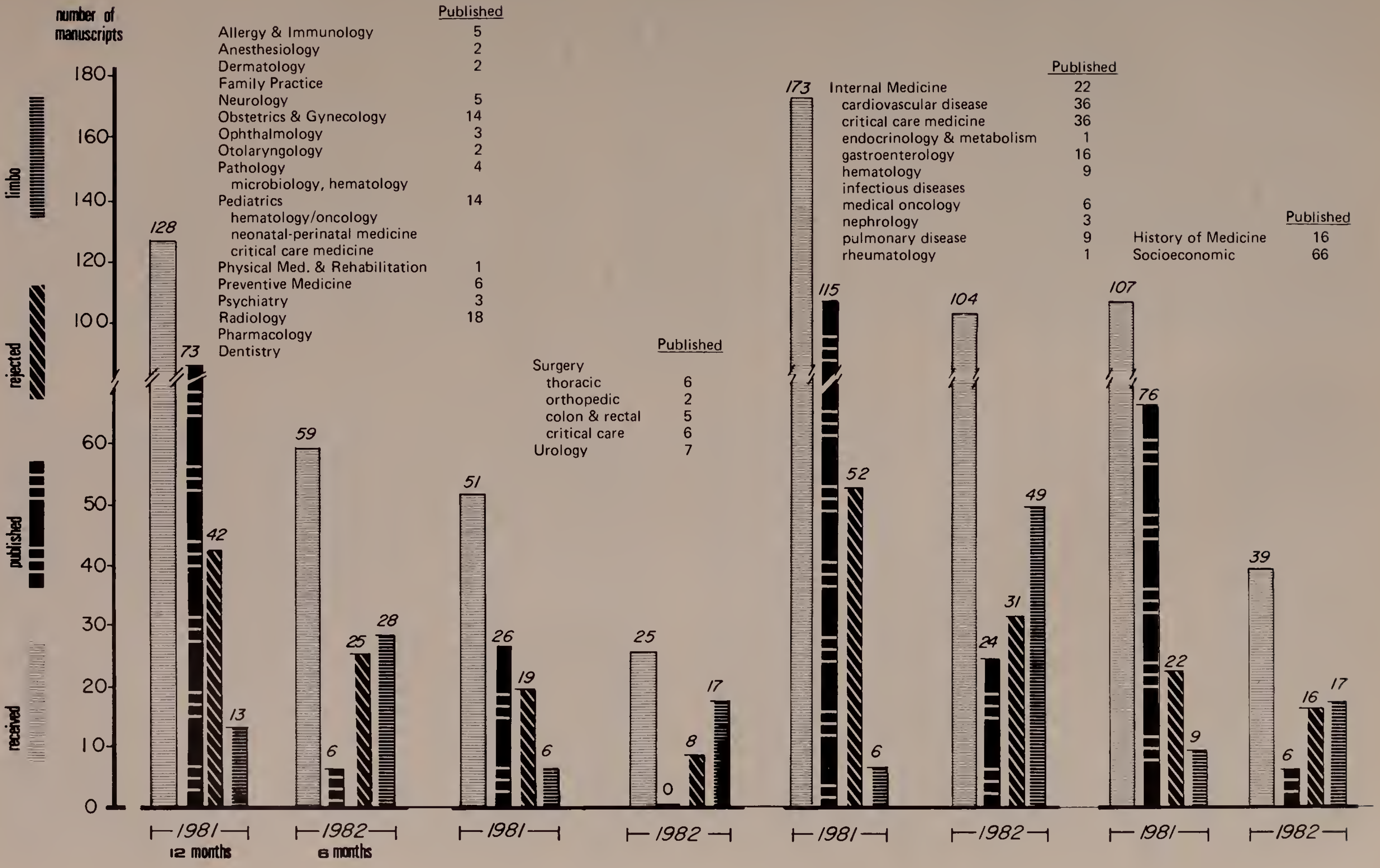
The Committee joins me in extending a special tribute to Alfred A. Angrist, M.D., for his dedication and for the service he has rendered to the Committee as Editor of the *New York State Journal of Medicine.*

As Chairman, I would like to express my appreciation to the members of the Committee and to the members of the Associate Editorial Board for the time and effort they have devoted to the *Journal,* and to Julius E. Stolfi, M.D., Associate Editor; Adele Spiegler, Managing Editor; and to the staff of the Division of Scientific Publications who have so effectively served the Committee during the past year.

Respectfully submitted,

Milton Gordon, M.D., *Chairman*

APPENDIX "A"



	Published
Allergy & Immunology	5
Anesthesiology	2
Dermatology	2
Family Practice	
Neurology	5
Obstetrics & Gynecology	14
Ophthalmology	3
Otolaryngology	2
Pathology	4
microbiology, hematology	
Pediatrics	14
hematology/oncology	
neonatal-perinatal medicine	
critical care medicine	
Physical Med. & Rehabilitation	1
Preventive Medicine	6
Psychiatry	3
Radiology	18
Pharmacology	
Dentistry	

	Published
Surgery	
thoracic	6
orthopedic	2
colon & rectal	5
critical care	6
Urology	7

	Published
Internal Medicine	22
cardiovascular disease	36
critical care medicine	36
endocrinology & metabolism	1
gastroenterology	16
hematology	9
infectious diseases	
medical oncology	6
nephrology	3
pulmonary disease	9
rheumatology	1

	Published
History of Medicine	16
Socioeconomic	66

◆

⟹ *Report of the Reference Committee on Scientific Activities, Publications, and Miscellaneous:* The following report was presented by Charles R. Salamone, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Publications be filed for information.

⟹ . . . *The report of the Committee on Publications was* **FILED FOR INFORMATION** . . .

Resolution 82-28, Subscription Fee for New York State Journal of Medicine

Introduced by the Bronx County Medical Society

Whereas, Publication of the *New York State Journal of Medicine* annually incurs a substantial deficit; and

Whereas, Only limited income from advertising and subscriptions is received to offset this deficit; and

Whereas, The publication costs for the *New York State Journal of Medicine* are paid for mostly from funds accrued from membership dues; and

Whereas, Complimentary copies are sent to various organizations and non-dues paying members, the cost for which is borne largely by dues paying members; therefore be it

Resolved, That the Medical Society of the State of New York charge all organizations and individuals receiving the *New York State Journal of Medicine*, exclusive of dues paying members, a fee equal to the current subscription rate of $10.00 per year (domestic) or $15.00 per year (foreign) in an effort to offset the deficit incurred in publishing the Journal.

◆

⟹ *Report of the Reference Committee on Scientific Activities, Publications, and Miscellaneous:* The following report was presented by Charles R. Salamone, M.D., *Chairman.*

Your reference committee feels that the fiscal impact of this resolution would be minimal since there are only approximately 300 complimentary and exchange copies of the *New York State Journal of Medicine* involved.

⟹ Your reference committee recommends that Resolution 82-28 not be adopted.

The House voted to amend Resolution 82-28 to read as follows:

Resolved, That the Medical Society of the State of New York charge all organizations and individuals receiving the *New York State Journal of Medicine*, exclusive of dues paying members or life members, a fee equal to the current subscription rate of $10.00 per year (domestic) or $15.00 per year (foreign) in an effort to offset the deficit incurred in publishing the Journal.

⟹ . . . *The House, after considerable discussion, voted to* **NOT ADOPT** *Resolution 82-28* . . .

Resolution 82-44, Publication of the *New York State Journal of Medicine*

Introduced by Broome County Medical Society, Inc.

Whereas, The *New York State Journal of Medicine* as a component of the operations of the Medical Society of the State of New York is a largely dues supported enterprise; and

Whereas, Only a minor portion of the financial support for the *Journal* comes from advertising income; and

Whereas, The quality of the scientific articles has diminished and as a result the *Journal* is unable to compete with other medical journals offered at no cost to physicians; and

Whereas, The *Journal* is currently not a self-supporting unit of MSSNY activities; and

Whereas, It is incumbent upon the membership to reassess the management structure and philosophies with regard to the production of the *Journal;* and

Whereas, In calendar year 1980 dues of members underwrote a deficit of $475,000 related to the production and distribution of the *Journal;* and

Whereas, In the calendar year 1981 dues of members underwrote a deficit of $457,628 related to the production and distribution of the Journal; therefore be it

Resolved, That the *New York State Journal of Medicine* cease and desist publication from this point forward until such time as the Medical Society of the State of New York can develop a sound fiscal plan culminating in financial self-sufficiency upon which the *Journal* can be managed, published, and distributed.

◆

⟹ *Report of the Reference Committee on Scientific Activities, Publications, and Miscellaneous:* The following report was presented by Charles R. Salamone, M.D., *Chairman.*

It is the unanimous consensus of your reference committee that the *New York State Journal of Medicine* is a bona fide membership benefit and enhances the stature of the Medical Society of the State of New York. Therefore, your reference committee recommends that Resolution 82-44 not be adopted.

⟹ . . . *The House voted to* **NOT ADOPT** *Resolution 82-44* . . .

Resolution 82-25, Publication of a MSSNY Leadership Newsletter

Introduced by Medical Societies of the Counties of Genesee, Niagara, and Orleans

Whereas, The leadership role of the Medical Society of the State of New York is directly proportional to its overall effectiveness and success; and

Whereas, The leadership role of the component county medical societies is equally important; and

Whereas, The officers and members of the component county medical societies look to MSSNY for leadership; and

Whereas, Communications is a crucial link between the leaderships of MSSNY and county medical societies; therefore be it

Resolved, That the Medical Society of the State of New York develop and publish, on a weekly or bi-monthly frequency, a MSSNY Leadership Newsletter, similar in nature, format, and purpose to that of the AMA Newsletter; and be it further

Resolved, That this MSSNY Leadership Newsletter will apprise both MSSNY and county medical society leaders of the innumerable important issues and actions affecting organized medicine; and be it further

Resolved, That such a publication, limited to the leadership of MSSNY and county medical societies, will simultaneously serve to benefit MSSNY and county medical societies in their mutual and effective leadership roles for further benefit of their members and patients.

Fiscal Note: $750

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⟹ *Report of the Reference Committee on Scientific Activities, Publications, and Miscellaneous:* The following report was presented by Charles R. Salamone, M.D., *Chairman.*

Inasmuch as there are mechanisms available on a Statewide basis that already fulfill the needs expressed in this resolution, your reference committee recommends that Resolution 82-25 not be adopted.

⟹ . . . *The House voted to* **NOT ADOPT** *Resolution 82-25* . . .

Resolution 82-57, To Institute a Persistent Public Relations Program in the Media

Introduced by Nassau County Medical Society, Inc.

Whereas, The image of the medical profession has fallen in the eyes of the general public; and

Whereas, The medical profession is often maligned unjustly with inaccurate facts in the media; and

Whereas, The views and opinions of the medical profession on many important issues are not always clearly and truly expressed by the media, if at all; and

Whereas, It is extremely important that these views and opinions be clearly made public in a timely fashion, which cannot be accomplished by letters to the editor; therefore be it

Resolved, That the Medical Society of the State of New York undertake a program on a one-year trial basis to publish an informational weekly column on medical and socioeconomic topics (similar to that used by Mobil Oil Company and Pfizer Laboratories); and be it further

Resolved, That this would be a public service message which could appear in the *New York Times* preferably in the same place on Sundays in Section 4, "News of the Week," or weekdays on the Op-Ed page either weekly or semimonthly, so that the general public and all concerned can clearly and honestly understand the issues and positions of the medical profession; and be it further

Resolved, That this program be instituted as soon as possible in view of the major issues present in today's climate both on medical and socioeconomic topics.

Fiscal Note: Approximately $400,000 for a column every Sunday ($20.00 per member expenditure)
Approximately $175,000 for a semimonthly column on the Op-Ed page

■

⟹ *Report of the Reference Committee on Scientific Activities, Publications, and Miscellaneous:* The following report was presented by Charles R. Salamone, M.D., *Chairman.*

Your reference committee is sympathetic to the need for a persistent public relations program and recommends that Resolution 82-57 be referred to the Council to explore ways and means through which this program can be implemented.

⟹ Your reference committee recommends that Resolution 82-57 be referred to the Council.

⟹ . . . *The House voted to* **REFER** *Resolution 82-57 to the Council* . . .

Resolution 82-11, Membership Procedures for Physicians

Introduced by Medical Society of the County of Westchester, Inc.

Whereas, The future of organized medicine lies in the participation of our young doctors; and

Whereas, Admission to local and state societies is often cumbersome, tedious, and unnecessarily complicated; therefore be it

Resolved, That the Medical Society of the State of New York and its component county medical societies consider the following recommendations concerning membership admission procedures:

(1) All federated medical organizations review their bylaws and membership procedures and remove all unnecessary barriers to membership as soon as possible.

(2) Endorse and encourage the universal utilization of the uniform application recently developed by the American Association of Medical Society Executives (AAMSE).

(3) All federated medical organizations implement a simple "transfer of membership" procedure that will facilitate uninterrupted memberships in organized medicine for physicians who relocate at any time during their careers.

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⟹ *Report of the Reference Committee on Scientific Activities, Publications, and Miscellaneous:* The following report was presented by Charles R. Salamone, M.D., *Chairman.*

⟹ Your reference committee recommends that Resolution 82-11 be adopted.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-11* . . .

ALFRED A. ANGRIST, M.D., EDITOR OF *THE NEW YORK STATE JOURNAL OF MEDICINE*

Introduced by the Queens County Medical Society

Whereas, Alfred A. Angrist, M.D., has served with dedication and consummate skill as Editor of the *New York State Journal of Medicine*; for ten years; and

Whereas, Under his aegis the *Journal* has risen from a professional nadir to a premier place in the nation among journals of its class; and

Whereas, He holds the affection, nay the love of all those who know him; therefore be it

Resolved, That the Medical Society of the State of New York recognize the services of Alfred A. Angrist, M.D., by an appropriate new title, new status, and honorarium, and that this be referred to the Council for implementation.

⟹ . . . *The House voted to* **ADOPT** *the above resolution unanimously* . . .

PUBLIC HEALTH AND EDUCATION

ACCIDENT AND INJURY PREVENTION

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Accident and Injury Prevention are as follows:

John D. States, M.D., *Chairman*	Monroe
Harold Brandaleone, M.D.	New York
Frank R. Collier, M.D.	Suffolk
David R. Heller, M.D.	Westchester
Marshall Lepidus, M.D.	Suffolk
Bernard M. Zazula, M.D.	Queens
* Eugene Gibilaro	Onondaga
Robert J. Huszar, M.D., *Advisor*	Albany

Since the last House of Delegates meeting, the Committee has met once, on November 24, 1981.

Child Restraints. The Child Restraint Bill was recently passed and signed into law. This is a significant forward step in occupant protection in New York State. The bill was amended before passage so as to include children up to age 4 in the requirement; as many as 4- and 5-year old children are so large as to be safer using the conventional seat belt. It is now essential that a major educational campaign be undertaken to see that the restraints are properly used.

Adult Safety Belt Usage Laws. In discussing the child restraint law with parents' groups, I have found that some parents are already concerned about the older child who outgrows his child restraint. I have hopes that we can extend the child restraint law to include older age groups and possibly some day to adults. It is also of great significance that the Governor's Task Force on Alcohol and Traffic Safety recommended that mandatory use of safety belts be enacted as the least expensive, most effective way of protecting occupants against the drinking driver.

Control of the Drinking Driver. The Stop-DWI programs are moving ahead at a rapid pace throughout the State. MSSNY, at the behest of Dr. Siegel and the Council, alerted county medical societies in November, 1981, that physician representatives should serve on the technical advisory committees of the Stop-DWI programs. Extensive funding is becoming available on the local level because the fines from offending drivers are returned directly to the localities in which they live. It is essential that the use of the funds be carefully balanced between the police, the judiciary, and the rehabilitation services. Local physician participation, hopefully, will ensure funding of rehabilitation and treatment programs.

The final report of the Governor's Task Force on Alcohol and Traffic Safety was released in January, 1982. A summary is appended. The principal thrust appears to be increasing public awareness of the problem and, hopefully, a willingness to enforce and control laws.

New York State is being watched by the entire nation and even some foreign countries because of these programs. MSSNY should do all within its power to ensure their success.

MSSNY Activities on Alcohol Control. The Committee will continue its efforts to develop an educational program for the police and judiciary in collaboration with the New York State Department of Motor Vehicles. Surveillance of the effects of other drugs, particularly marijuana, on driving and accident causation in general will be continued. Emergency departments will be encouraged to freely undertake alcohol and other drug level determinations among all patients admitted because of accidental injuries. Collaboration with the MSSNY Committee on Alcoholism has strengthened and broadened our prevention and safety efforts and will be continued in the future.

Senator John Caemmerer. New York State Senator John Caemmerer died in February, 1982, after a long illness. He was Chairman of the Senate Committee on Transportation and a loyal and highly effective supporter of the MSSNY's activities in traffic safety. His passing is noted with great regret and our deepest sympathies are extended to his family.

Governor's State Traffic Committee. The Committee also regrets the dissolution of the Governor's State Traffic Committee, which has been effectively guided by Mr. Julian Rivo. The Committee has supported and shared common goals in traffic safety with the Governor's Committee, and their support in the future is going to be sorely missed.

Respectfully submitted,

John D. States, M.D., *Chairman*

APPENDIX

GOVERNOR'S ALCOHOL AND HIGHWAY SAFETY TASK FORCE

Executive Summary

The Governor's Alcohol and Highway Safety Task Force sets one clear goal: to reduce dramatically the incidence and tragic consequences of drunk driving in New York State. To achieve this goal, the Task Force recommends a comprehensive systems approach that will raise perception of risk through public education and increased detection and apprehension; cause swift removal of the license and certain application of substantial penalties; and, provide access to appropriate rehabilitation services. Operating within this framework, the Task Force's comprehensive program will:

Change from a one-track criminal proceedings system to a two track — administrative and criminal; reduce license action from six months to one week.

Enact legislation requiring that a driver who is alleged to be operating a motor vehicle with a blood alcohol concentration (BAC) of .10 or above would have five days within which to request an administrative hearing concerning whether he had such a blood alcohol concentration.

Provide for a mandatory 90-day license suspension upon either the waiver of the hearing or a finding that the driver operated a motor vehicle with a blood alcohol concentration of .10 or above.

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* Medical Student

Impose mandatory fines as a result of court action.

Mandate seven days in jail for driving while license is revoked/suspended for an alcohol offense.

Develop a statewide interdepartmental police DWI enforcement campaign.

Organize enforcement campaigns including systematic traffic check points and consistent, coordinated public information programs to raise the public perception of the risk of apprehension.

Expand the grounds for requesting that a driver be asked to submit to an alcohol impairment screening test.

Eliminate fingerprinting requirement (local option) to put more police on patrol.

Mandate occupant restraint usage — all occupants of a motor vehicle be required to use seat belts to reduce crash fatalities and injuries.

Coordinate all alcohol and highway safety public information and education activities.

Encourage community level responsibility.

Ensure appropriate education programs for convicted drinking drivers.

Demonstrate new screening models to improve referral of problem drinkers to appropriate rehabilitation programs.

Support changes in improved design of vehicles and roadways.

Include research and evaluation function in all activities.

Encourage all alcohol and highway safety programs be user-funded.

■

⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Accident and Injury Prevention be filed for information.

⟹ . . . *The report of the Committee on Accident and Injury Prevention was* **FILED FOR INFORMATION** . . .

AGING AND NURSING HOMES

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Aging and Nursing Homes are as follows:

Robert Collins, M.D., *Chairman*	Onondaga
Ernest T. Anderson, M.D.	Monroe
Albert F. R. Andresen, Jr., M.D.	Westchester
Evelyn P. Dooley, M.D.	Kings
Fred N. Flatau, M.D.	Queens
Eli A. Leven, M.D.	Monroe
Edward J. Lorenze, M.D.	New York
Stuart J. Miller, M.D.	Chemung
Jack R. Muth, M.D.	Suffolk
Leon M. Rothman, M.D.	Kings
Paul W. Sum, M.D.	Cattaraugus
Garrett W. Vink, M.D.	Putnam
* Jeffrey S. Ben-Zvi	New York
George M. Warner, M.D., *Advisor*	Albany

The Committee met on October 20, 1981; February 5, 1982; and April 2, 1982.

Since the last annual report, the Committee continued its in-depth study of the apparent shortage of long-term care beds in New York State and the overall problem of long-term care services. Alternate methods were considered and recommended to be implemented for these patients. The Committee suggested: improving hospital discharge planning, developing incentives for home placement, and expediting Medicaid payments. A motion was passed:

> "That it is the recommendation of the Committee that consideration should be given for the formulation of laws by the State on New York which would make it more financially feasible for families or other persons to care for the elderly at home rather than in an institutional setting."

Some deregulation of nursing homes was proposed by the Federal Government. This would have eliminated the requirement that a physician be the Medical Director in residential health care facilities. The following motion was passed and forwarded to the Council:

> "The Committee recommends that the position of the MSSNY endorsing the role of the Medical Director in long-term care facilities should be reaffirmed and brought to the attention of the AMA, requesting that the AMA, which also supports this concept, bring to the attention of Vice-President Bush's Task Force the positions of the AMA and MSSNY."

The role of the pharmacist in residential health care facilities was considered by the Committee. After in-depth discussion, the Committee passed the following motion:

> "That the Committee on Aging and Nursing Homes and the MSSNY recommend to the New York State Department of Health that the present regulations on the pharmacist's review of the drug regimen of patients be maintained as is."

The Committee reviewed the requirement for physician visits in long-term care facilities. The Committee reaffirmed its previous position which was approved by the MSSNY Council in 1981, and recommended that this position be forwarded to the Federal Government. The motion read:

> "That the Committee on Aging and Nursing Homes and the MSSNY are in favor of maintaining the thirty-day visit requirement for long-term care facilities, but that a plus or minus five-day leeway be given in the actual implementation of this requirement."

The Council of MSSNY referred to the Committee Resolution 81-20, "Medical Personnel, Such as Nurses on Staff at Domiciliary Care Facilities." The resolution read;

> "**Resolved,** That the MSSNY investigate the rationale for the regulation which prohibits reimbursement for a medically trained individual on staff at a domiciliary care facility; and be it further
>
> **Resolved,** that the MSSNY actively advocate the revision of any such regulation in such a way that a domiciliary care facility allow reimbursement for an 'on staff' medically trained individual."

This problem is based on the poor flow of people within the long-term care facilities, including domiciliary facilities. One result of this poor flow has been the backing up into domiciliary care facilities of people who require medical supervision for which the facility can receive no reimbursement. Our Committee deplored this situation and recommended the following substitute resolution for Resolution 81-20:

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* Medical Student

> "**Resolved,** That the Committee on Aging and Nursing Homes and the MSSNY recognize that many of the domiciliary care facilities have patients who require some form of medical supervision; and be it further
>
> **Resolved,** That the MSSNY advocate that domiciliary care facilities who have patients who require some form of medical supervision be allowed to have a health care professional (nurse) present, and that the facility be reimbursed for such services."

The Council approved the recommendations of the Committee and took appropriate action on all except Resolution 81-20, which was referred back to the Committee on Aging and Nursing Homes for further study. The Committee will meet following the House of Delegates meeting and will consider further action at that time on Resolution 81-20.

The Committee received regular reports from Dr. Warner in regard to the Sentinel Health Events Program, a modified surveillance system which studies the records of institutions to determine the quality of health care. The program is in the evaluative stage with particular attention to the statewide norms that were initially established. On the whole, the norms are holding up. Personnel are responding well and using the reported information to correct deficiencies in care. A detailed report is being prepared for submission to the Federal Government and will be available sometime this fall.

Also discussed by the Committee were the training programs now being initiated at Hunter College-Brookdale Center on Aging and the College of Human Ecology at Cornell University in regard to training staff to deal with mentally impaired patients. The expectation is to develop model training programs which can be adopted by other institutions in the State.

The Committee noted the Office of Health Systems Management's Memorandum 8151 in regard to the immunization of employees in long-term care facilities against rubella. This requirement was subsequently withdrawn by the OHSM.

The Committee chose two topics for future study: 1) the role of the Medical Director in the related health care facility (RHCF) and 2) the place of residential RHCF facilities in the health care system.

During the legislative session, the Committee Chairman responded to requests from the Division of Governmental Affairs of the MSSNY for opinions on bills proposed which related to aging or nursing homes.

The Committee lost a valued member with the death of James A. Moore, M.D., on February 1, 1982. A letter of condolence was forwarded to Mrs. Moore.

The Chairman wishes to thank his Committee members who have worked so diligently and enthusiastically this year. The Chairman wishes to thank Dr. George M. Warner, Dr. George J. Lawrence, Mrs. Elizabeth Daepp, and Miss Cynthia Mustapich for their kind and generous assistance during the year.

Respectfully submitted,

Robert Collins, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Aging and Nursing Homes be filed for information.

⟹ . . . *The report of the Committee on Aging and Nursing Homes was* **FILED FOR INFORMATION** . . .

ALCOHOLISM

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Alcoholism are as follows:

Stanley E. Gitlow, M.D., *Chairman*	New York
Sheila B. Blume, M.D.	Albany
Pasquale A. Carone, M.D.	Nassau
Sidney S. Greenberg, M.D.	New York
Edward Hanin, M.D.	Westchester
William L. Holt, Jr., M.D.	Albany
James McGowan, M.D.	New York
Robert R. Morgan, M.D.	New York
Brian R. Nagy, M.D.	Chemung
Hans J. Nieporent, M.D.	Kings
Cedric M. Smith, M.D.	Erie
Norman W. Wetterau, M.D.	Livingston
* Eric Feit	Kings
Andrew McBride, M.D., *Advisor*	Albany

The Committee on Alcoholism has continued to be active during the past year. The majority of the members met every few months between the meeting on July 14, 1981, and that on May 25, 1982.

After the formulation of the program entitled "Alcohol and the Unborn" for presentation at the CME Assembly on June 26, 1981, the manuscripts were readied for publication as a symposium. This will be due for publication during the summer of 1982 and will represent the third consecutive year in which this Committee has prepared an annual program on a subject which was deemed valuable enough to be presented to the membership via the *New York State Journal of Medicine.*

Unfortunately, the lack of sectional status and the inability to achieve sectional sponsorship resulted in the loss of the opportunity to present a program at the annual meeting in June of 1982. The Committee had proposed that the program this year consist of a detailed evaluation of the interface between drug dependency and the emergency room. This was to include reference to the varying types of pathology which the alcoholic and other drug dependent individuals present, as well as the peculiar medical, social, and legal problems which such individuals often present. Although both Dr. David Kluge, Chairman of the Committee on Emergency Health Services, and Dr. John States, Chairman of the Committee on Accident and Injury Prevention, supported this type of program, the respective sections failed to do so. This problem had been emphasized in the past by the inability to formulate conjoint programs in previous years.

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* Medical Student

There is little disagreement about the relative inadequacy of medical school training in areas of drug dependencies. Nor is there substantive disagreement about the need for some degree of familiarity and hopefully even expertise in this area by practicing physicians. Every medical specialty interfaces with alcoholism in some aspect of its manifold expression. It is obvious that post-graduate training exercises in the field of drug dependencies is urgently required. Unfortunately, these illnesses cut across the usual specialty demarcations. Although hypertension has a constituency within internal medicine and the complications of alcoholism are presented in a myriad of ways, the primary illness itself has failed to be embraced by any singular group. Until relatively few years ago, psychiatry looked upon it as the background behind the cirrhosis, and the orthopedic surgeon saw only the mangled bodies taken from the broken automobile. Child abuse impacts upon the pediatrician, the Fetal Alcohol Syndrome upon the obstetrician, cancers of the mouth and throat upon the ENT surgeon, and medical noncompliance upon all of us. On the other hand, without a specific constituency, the biggest killer of our young adults remains inadequately taught to our first line of defense, the medical profession. The Committee feels that more adequate and consistent CME exposure would result from sectional status. This would result in the resource of a specialty constituency and in a lessening of the difficulties of programming this subject. We welcome the efforts of some county societies to formulate this change as a socially mature and responsible course for organized medicine.

Meanwhile, the efforts to fulfill the mandate of the delegates to formulate an offer to the MSSNY membership a broad group health insurance package go ever onward. Our members still possess no adequate health coverage against those very illnesses to which they seem so prone. We favor more adequate third party coverage for our patients but continue to write the poorest policies for ourselves. We do not even have parsimony as an adequate excuse since it has been clearly shown that third party overall costs are reduced by such coverage. Mr. Bernard Jackson, Director of the Division of Insurance and Membership Benefits, has developed some excellent opportunities for such policies over the past five years. If indeed, as has been claimed by some, the desire for the use of local insurance agents has obstructed such a program, one would wish that those very same local agents would develop health insurance programs more favorable to our membership's needs.

The Committee supported Senate Bill 6831 favoring adequate and appropriate instruction for drivers who had DWI convictions. Discussion centered about those states currently changing their laws so as to permit spot checking for discovery of drivers using ethanol.

The Committee is presently investigating the use of and experience with the lay education system, Tel-Med. We expect to develop a report and recommendations before year's end.

Respectfully submitted,

Stanley E. Gitlow, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Alcoholism be filed for information.

⟹ . . . *The report of the Committee on Alcoholism was* **FILED FOR INFORMATION** . . .

CANCER

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Cancer are as follows:

Charles E. Rogers, M.D., *Chairman*	Nassau
I. Joseph Aprile, M.D.	Queens
Daniel Burdick, M.D.	Onondaga
Richard J. Calame, M.D.	Kings
Richard G. Cooper, M.D.	Erie
John A. Finkbeiner, M.D.	New York
Richard H. Lange, M.D.	Schenectady
Joseph Newall, M.D.	New York
Charles D. Sherman, Jr., M.D.	Monroe
Herbert Volk, M.D.	Bronx
* Charles A. Morrow	New York
Dwight Janerich, D.D.S., *Advisor*	Albany

The 1981/1982 period found the Committee on Cancer considering matters reviewed in prior years, as well as what seem to be new items and problems.

The matter of laboratories performing *in vitro* testing as a means of predicting the response of specific patients' tumors to chemotherapeutic agents again provoked considerable discussion. So far as could be ascertained, no data exists which indicates that such testing is a reliable predictor of response. Further, it appears that the State Department of Health has not devised quality controls nor licensed laboratories to provide such a service commercially.

RECOMMENDATION: That the New York State Department of Health investigate the matter and take steps to prevent laboratories from offering such services on a commercial basis until adequate data exists to support the validity and predictability of the tests.

The matter of the use of marijuana and/or Tetrahydrocannabinol (THC) as adjuncts to chemotherapy in cancer patients was reviewed. The protocol for the State's program calls for the smoking of cigarettes, which inhalation method appears to produce a considerably more rapid response than the ingestion of THC capsules. The refusal of patients to smoke anything prompted the Marijuana Committee to consider the use of THC in aerosol. The aerosol is envisioned as being used in a manner similar to that for asthmatic patients. Efforts are being made to interest drug companies in producing such an aerosol containing THC. It is conjectured that a more precise dose could be delivered and related to the blood levels needed to prevent nausea and vomiting. This would be accompanied by response times as good as, or better than, marijuana cigarettes.

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* Medical Student

The Committee recommended that the Medical Society of the State of New York encourage the formation of committees on cancer in the county medical societies. Further, the Committee felt that county medical societies should be encouraged to support various anti-smoking activities in their counties. Such activities could be: 1) encouraging the ban of cigarettes in hospitals, 2) encourage a policy of no smoking in patient rooms, and 3) establishing separate smoking areas in waiting rooms and lounges. This recommendation was approved by the Council at its meeting on April 22, 1982.

Occult blood testing was again discussed and the consensus was that it is the only cost-effective practical means we now have of screening for carcinoma of the colon. Several recent papers, including one presented at the Society of Surgical Oncology, attest to this.

RECOMMENDATION: Appropriate State Health Code changes to require that rectal examination and occult blood testing be recorded on every hospital chart unless medically contraindicated, refused by the patient or done witin the past year. This was disapproved by Council at its April 22, 1982, meeting.

The Committee recommended Medical Society of the State of New York endorsement of the New York State Department of Health Center Bureau's study on lung cancer among nonsmokers. The study will utilize the Bureau's cancer registry, one of the largest in the world. This was approved by the Council at its meeting on April 22, 1982.

The Committee continues to feel strongly that no adequate statutes exist in New York State to protect the citizens from quackery and unproven methods for cancer treatment.

RECOMMENDATION: The Medical Society of the State of New York support a Cancer Remedies Act to diminish cancer quackery activities in New York State; this was previously presented. The Council disapproved this recommendation at its meeting on April 22, 1982.

Of incidental interest is the fact that Oklahoma lawmakers recently enacted legislation to enable patients to be treated with a method which is unproven. The state seems to have presumed to supercede the Food and Drug Administration (FDA) in requiring the Oklahoma Board of Health to set standards for manufacturing, compounding, processing, etc. The legislation specifically addresses itself to immunoaugmentative therapy. This quackery is perpetrated by a zoologist, Lawrence P. Burton, who departed the Great Neck, New York, area for the Bahamas about 1974. I personally observed three patients whose tumors grew and flourished with Dr. Burton's serum treatment while, simultaneously, he relieved them of substantial sums of money paid *in advance*. A copy of information concerning this legislation is appended for your interest.

Recently, the New York State Legislature proposed a law designed to require that women be fully informed of all possible alternate means of treatment of breast cancer. This is similar to a Massachusetts statute.

RECOMMENDATION: Medical Society of the State of New York should oppose such legislation.

The Committee discussed the recent closings of several therapeutic radiology services in hospitals because they did not meet standards which were promulgated by the State Health Planning Commission. It was felt that some of the standards were too rigid. The Committee noted that these closings have caused a hardship to some patients due to the extra travel now required to obtain these services. Further study is needed in this manner and a motion was made:

> "That the Council ask Dr. Axelrod to delay further closings of therapeutic radiology services until additional study can be done and that the Council offer the services of the Committee on Cancer to study the problem and come back with a recommendation within 60 days."
>
> The motion was duly seconded and passed unanimously. The motion was disapproved by the Council at its meeting on April 22, 1982.

Respectfully submitted,

Charles E. Rogers, M.D., *Chairman*

APPENDIX

OKLAHOMA OKAYS AN UNPROVED THERAPY*

Oklahoma became the first state in the nation to enact a law permitting the use of "immunoaugmentive therapy" (IAT or IAT blood fractions) for the treatment of cancer and other diseases when Governor George Nigh signed the bill March 2. The Oklahoma House had passed the bill 97 to 0 on Feb 3, and the Senate had passed it 37 to 0 on Feb 25.

The law prohibits any hospital from restricting use of the therapy and bans the state Board of Medical Examiners and the state Board of Osteopathic Examiners from disciplining any physician who prescribes the therapy.

It does provide, however, that IAT can be given only to a patient who signs a "written informed request" form from the State Board of Health. This form states that the therapy has not "been approved as a preventative, treatment, or cure for any malignancy, disease, illness, or physical condition by the federal Food and Drug Administration" and that "neither the American Cancer Society, the American Medical Association, [n]or the Oklahoma State Medical Association recommends the use of IAT or IAT blood fractions."

The patient form also includes a statement that "my physician has explained to me that there are alternative, recognized treatments for the malignancy, disease, illness, or physical condition from which I suffer which he has offered to provide for me" and requests the patient to list these. The patient must also agree to "authorize the Oklahoma State Board of Health to contact me or my physician regarding my treatment with IAT blood fractions in order to monitor my progress while receiving such treatment."

Furthermore, the law states that the Oklahoma Board of Health

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* JAMA, April 9, 1982 — Vol 247, No. 14

"shall adopt rules and regulations specifying minimum standards for manufacturers in preparing, compounding, processing, and packaging of IAT blood fractions within 60 days after the effective date of this act. The board shall license manufacturers who meet those minimum standards within 30 days after application has been made by such manufacturers. The board shall conduct periodic inspection of the facilities manufacturing IAT blood fractions."

Immunoaugmentative therapy, developed by zoologist Lawrence P. Burton, PhD, purports to bolster the patient's immune defenses using "deblocking agents" found in blood fractions. Patients have been treated with IAT at his Immunology Research Centre in Freeport, The Bahamas, since 1974.

An FDA spokesman said an Investigational New Drug (IND) application was received from Burton's center in Great Neck, Long Island, also in 1974, just before he moved the center to The Bahamas. Requests for further information were not answered, however, and in 1976, the IND application was placed in the inactive files of the FDA's Bureau of Biologics. The FDA presently advises the public "to avoid this unproved nostrum."

According to David Fischer, MD, a New Haven, Conn, oncologist, the only attempt at a scientific report on the work of the center was made by William Terry, MD, of the National Cancer Institute. (Fischer chaired a workshop on unproved methods of cancer treatment held by the American Society of Clinical Oncology in Washington, DC, last spring.) Terry made a site visit in January 1978 and concluded that Burton's trials were "not evaluable" (*JAMA* [MEDICAL NEWS] 1981;246:714-715).

The atmosphere around the Oklahoma State House during passage of the bill permitting the use of IAT was "very emotional," according to Lyle R. Kelsey, associate executive director of the Oklahoma State Medical Association (OSMA). The House bill was introduced by Representative Carl Twidwell, whose wife, Marjorie, was in Freeport receiving the Burton treatment for cancer of the lung.

"It became a very tough issue here, one that had little to do with facts or reason," Kelsey said. The issue had much more to do with freedom of choice and right of last resort. Our opposition made us look like 'bad guys' who prefer to cut and burn, while arguments for the Burton therapy were based largely on testimony that people were cured, not hurt.

"It became apparent," Kelsey continued, "that we couldn't prevent passage of the bill. We decided, therefore, to take a different tack and see that the bill included the provisions about the informed consent and state health department regulation of the actual IAT blood fractions."

There are 4,000 physicians in Oklahoma, Kelsey said, and 3,300, or 82.5% of them, are members of OSMA. "The only conflict in our membership about the bill was whether we had acted strongly enough," Kelsey explained. "There were those who thought the medical profession here already had a black eye from the legislation of laetrile in 1978 [Oklahoma was the first state to do so] and of DMSO [dimethyl sulfoxide, a wood pulp product] in 1981."

The current rumor, Kelsey added, is that Burton plans to be in Oklahoma shortly to scout out land on which to build his clinic. He also will need a physician or an osteopathic physician to administer his therapy, Kelsey noted, adding: "And he may well be able to find one."

But "the real test will come when we see just how 'humanitarian' Burton is when he is forced to meet state health department regulations for the manufacture and preparation of his 'magic formula,' " Kelsey said. "We'll find out how willing he is to play by the rules."

Bob E. Jones, executive director of the Oklahoma Osteopathic Association (OOA), also is "confident that Burton will find some MD or DO to help him in his clinic." But, it will be "difficult or impossible" for the state health department to regulate his therapy, according to Jones, because Burton has not informed outsiders of IAT preparation methods.

The 600-member OOA represents 99% of the osteopathic physicians in Oklahoma, said Jones. "Some of our doctors were opposed to the legislation," he added, "but others supported it because it provides an alternative to a cancer patient." One member, in fact, is in Freeport "right now" getting Burton's therapy, Jones said. — by Harriet Page

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Cancer be filed for information.

⟹ . . . *The report of the Committee on Cancer was* **FILED FOR INFORMATION** . . .

CHILD ABUSE

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Child Abuse are as follows:

Marvin L. Blumberg, M.D., *Chairman*	Queens
Eliza H. Caldwell, M.D.	Westchester
Dominick J. DiMaio, M.D.	Kings
Vincent J. Fontana, M.D.	New York
Donald Lynn, M.D.	Chemung
Lester Schiff, M.D.	Niagara
Doris L. Wethers, M.D.	New York
* Jonathan A. Graff	Erie
Solbritt Murphy, M.D., *Advisor*	Albany

During the past year the Committee on Child Abuse has continued to broaden its contacts and its influence in significant areas that are or that should be involved in the prevention and management of child abuse. There has been ongoing communication with representatives from the Human Resources Administration (HRA) and the Department of Social Services (DSS) of New York State concerning their activities in matters pertaining to child abuse.

Some important actions are taking place. DSS is establishing methods for Medicaid payment to hospitals to which abused children are admitted and remanded by the courts to be held pending adjudication of placement. This will relieve a paradoxical financial problem of reimbursement for the involved hospitals. Another development is the increasing participation of district attorneys in child abuse cases. Last year DSS ordered that all reports of child abuse must be telephoned to the Albany register toll free number, 1-800-342-3720, rather than directly to the local agencies, and must be followed by a written report on Form DSS2221 if the child is hospitalized. The Child Protective Services (CPS) then reports the cases to the local designated agencies for follow-up. Since December, 1981, all felony abuse cases have also been reported to the local district attorneys. Currently a bill has been introduced into the State Legislature (A.9512 — Vann) mandating immediate reporting of all cases and all accompanying data to the local district attorneys and police enforcement agencies upon written request. The district attorneys will decide on the necessity of involvement of their offices in each case in addition to the management by the Special Services for Children of DSS. The Committee on Child Abuse will seek the opinions of district attorneys concerning their desire and acceptance of physician advisors for cases of child abuse.

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* Medical Student

As a result of the Committee's recommendation and of their requesting the cooperation of the New York State District II of the American Academy of Pediatrics, the Council of MSSNY accepted a letter, signed by Dr. Milton Rosenberg, President of MSSNY, and by Dr. James G. Lione, Chairman of the Academy District II, which was sent to the chairmen of the department of pediatrics of the medical schools with a copy to the deans and to the deans of the dental schools. The letter urged them to include in their curricula courses and lectures on child abuse and neglect if they were not already doing this. A sample suggested curriculum was included with the letters. The best way to sensitize physicians and dentists to recognize evidence of child abuse and to make them aware of methods of management is to inculcate this information in their minds during their training years. Several enthusiastic responses were received, some indicating that their schools were already furnishing such instructions.

There is now evidence of spreading professional concern and activity beyond the act of individual reporting of cases. In the County of Queens there is a very active multidisciplinary Borough President's Council on Maltreatment Services embodying a Task Force on Child Abuse. The Medical Society of the County of Queens has just established a Committee on Child Abuse. Both are kept informed of the activities of the MSSNY Committee on Child Abuse. There are assuredly similar professional groups in other areas of the State and more would certainly be advantageous.

A news release from MSSNY in November, 1981, describing the efforts of the Committee and the problems of child abuse was given wide distribution in the media throughout the State. As a consequence, articles were published in MSSNY "*News of New York*", in the *AMA News*, and in many regional newspapers. The Chairman of the Committee was interviewed by several newspapers and by radio stations live from Binghamton and Buffalo. He also appeared live on Physicians Radio Network that broadcasts on a special wavelength to 37 cities throughout the United States and includes toll-free telephone call questions and answers.

The Chairman was visited by Suellen Muldoon, Associate Director of the Department of Mental Health of the American Medical Association, who was seeking information about MSSNY's activities in the matter of child abuse. The AMA House of Delegates is exploring this issue in order to determine if there is an appropriate role for AMA involvement. They expect to contact the American Bar Association, the American Academy of Pediatrics, the American Dental Association, and other national professional groups. There has been a proposal for an AMA Task Force on Child Abuse. Ms. Muldoon expressed great interest and approval of the activities of the Committee on Child Abuse, especially the approach to the professional schools, and she promised to communicate future AMA developments.

The subject of intrafamily sexual abuse of children is being increasingly disclosed. It is much more difficult to observe than physical trauma and probably more emotionally devastating. The number of unsuspected cases is undoubtedly tremendous. There may be a regressive trend occurring toward tolerance of sexual misuse of children by adults under the misconception of teaching or enhancing their sexual development. This was indicated in an article in the September 7, 1981, issue of *Time* magazine entitled, "Sexes — Cradle to Grave Intimacy," that quoted some professionals who condoned, even approved, and some who severely decried this behavior. The Committee will be focusing increasing attention on this matter.

Several members of the Committee continue to lecture before various professional and lay audiences on the various aspects of child abuse and neglect. Members are also involved with forensic and judicial issues of the subject.

The Committee wishes to express its sincere appreciation and gratitude to Dr. George J. Lawrence and Mrs. Elizabeth H. Daepp for their gracious and very competent assistance.

Respectfully submitted,
Marvin L. Blumberg, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Child Abuse be filed for information.

⟹ . . . *The report of the Committee on Child Abuse was* **FILED FOR INFORMATION** . . .

CONTINUING MEDICAL EDUCATION (ANNUAL)

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Continuing Medical Education are as follows:

Peter B. Farnsworth, M.D., *Chairman*	Westchester
Melvin H. Becker, M.D.	New York
Edward D. Coates, M.D.	Dutchess
John S. Davis, M.D.	Otsego
Louis J. Delli-Pizzi, M.D.	Nassau
William C. Felch, M.D.	Westchester
Michael H. Grieco, M.D.	New York
Solomon Hershey, M.D.	Bronx
Marilyn M. S. Kritchman, M.D.	Queens
George R. Lovell, M.D.	Monroe
Harold W. Mayberger, M.D.	Nassau
William F. Mitty, Jr., M.D.	New York
William Mullin, M.D.	Kings
William P. Nelson, III, M.D.	Albany
Stephen Nordlicht, M.D.	New York
James R. Nunn, M.D.	Erie
Ward L. Oliver, M.D.	Schoharie
Robert L. Patterson, Jr., M.D.	New York

Richard L. Pearlman, M.D.	Richmond
Richard N. Pierson, Jr., M.D.	New York
Bernard J. Pisani, M.D.	New York
Theodore J. Prowda, M.D.	Madison
Sheldon H. Putterman, M.D.	Queens
Fred Rosner, M.D.	Queens
Charles D. Sherman, Jr., M.D.	Monroe
John F. Spring, M.D.	Broome
Harry L. Stein, M.D.	Nassau
Tamarath K. Yolles, M.D.	Suffolk
* Ellen B. Kaplan	Suffolk
Julia L. Freitag, M.D., *Advisor*	Albany

Since the last meeting of the House of Delegates, the Continuing Medical Education Committee has met three times: September 11, 1981; November 20, 1981; and March 5, 1982.

Survey and Accreditation Activities. The Committee on Continuing Medical Education has continued its policy of previous years of referring applications for accreditation and resurveys to a CME survey subcommittee. Original applications for accreditation are evaluated by the on-site survey method. Those institutions applying for reaccreditation have been resurveyed by the reverse-site survey method. The latter, by and large, proved to be an efficient and effective method of dealing with the relatively large number of resurvey requests.

The following institutions were resurveyed and reapproved for full accreditation:

Manhattan Eye, Ear & Throat Hospital
New York State Psychiatric Association
Academy of Medicine of Queens County
The Staten Island Hospital
Glens Falls Hospital
St. Vincent's Hospital and Medical Center of New York
Nassau Hospital
Ellis Hospital
Flushing Hospital
Central New York Academy of Medicine
Nassau Academy of Medicine
Lutheran Medical Center
Mary Imogene Bassett Hospital

The following institutions were resurveyed and received provisional accreditation:

Creedmoor Psychiatric Center
New York City Department of Health
Booth Memorial Medical Center

The following instutition was an original survey and received provisional accreditation: Rockland County Community Health Center.

The Committee discussed the new regulations from the Accreditation Council for Continuing Medical Education that now allow full accreditation to be granted for a period of up to six (6) years. The Committee felt that six years was too long a period for full accreditation in view of probable hospital and personnel changes, budgetary support, and other factors. A motion was made:

> "It shall be a policy of MSSNY to grant full accreditation to institutions for a period of four (4) years."
>
> This motion was duly seconded and passed unanimously. This motion was made known to the ACCME.

The Committee recommended that each institution it accredits be given a certificate of accreditation. Accredited institutions are now receiving certificates of accreditation bearing the logo and signature of both ACCME and MSSNY. The Committee is currently actively reviewing the proposed ACCME essentials for accreditation. The Committee will provide input requested by ACCME in the development of the essentials.

MSSNY Requirement for CME. The Committee has continued to closely monitor the impact of CME requirements for MSSNY membership which became effective in March, 1981. The Committee was of the opinion that the number of physicians whose membership would be terminated through noncompliance with the CME requirements was relatively small. However, it would not like to see any members of MSSNY dropped because of this. The Committee felt strongly that every effort should be made to ease compliance for reporting without losing sight of the CME standards developed over the years. The Committee recommended that noncompliant members be put on probation until such time as they fulfilled the CME requirements, and that the County Medical Societies conduct studies to evaluate the reasons for noncompliance. This recommendation was discussed by the Executive Committee and it was recommended that a letter be sent to all delinquent members, explaining the Bylaw requirements, and asking them once more to complete their requirements by attesting to a certificate which accompanied the letter. The latter recommendation was approved by the Council at its meeting on December 17, 1981. Eventually only 53 members were dropped for failure to report the fulfillment of the CME requirement.

The Committee discussed Resolution 81-7, "Rescinding of Continuing Medical Education Requirement for Membership," in depth. The Committee felt that it would not be in the best interest of MSSNY or for physicians in New York State to rescind this requirement for membership. The Committee felt that the many positive aspects which have resulted from the planning and development of a CME program would be greatly weakened if this requirement were dropped. The CME Committee motion was made and approved:

> "That Resolution 81-7 should be disapproved in principle."
>
> This motion was passed unanimously and the House Committee on Bylaws was informed of this opinion.

CME Council of the State of New York, Inc. The Committee has continued to work closely with the CME Council of the State of New York, Inc. This Council is composed of representatives from each of the following bodies: the Associated Medical Schools of New York, the Association of Medical Specialty Societies of New York, and the Medical Society of the State of New York. This Council has advisors from the New York State Department of Health and from the New York State Department of Education.

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* Medical Student

In conclusion, the Committee wishes to gratefully acknowledge the support and guidance provided by George J. Lawrence, M.D., and his staff.

Respectfully submitted,

Peter B. Farnsworth, M.D., *Chairman*

CONTINUING MEDICAL EDUCATION (SUPPLEMENTARY)

To the House of Delegates, Ladies and Gentlemen:

This report is to supplement the material presented in our annual report of 1982.

The Committee on Continuing Medical Education met a fourth time this year on September 24, 1982. The purpose of the meeting was to review the reports on five institutions in New York State and to decide upon the type and length of accreditation to be granted. Below is a list of those institutions and the action taken by the Committee.

The following institutions were resurveyed:

Name	Type/# of Years
1. Harlem Valley Psychiatric Center	Provisional/2
2. Nassau County Medical Center	Accreditation/4
3. Rensselaer County Academy of Medicine	Accreditation/4
4. St. Luke's Roosevelt Hospital Center	Accreditation/4
5. United Health Services, Inc.	Accreditation/4

Respectfully submitted,

Peter B. Farnsworth, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the annual and supplementary reports of the Committee on Continuing Medical Education be filed for information.

⟹ . . . *The annual and supplementary reports of the Committee on Continuing Medical Education were* **FILED FOR INFORMATION** . . .

DRUG ABUSE

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Drug Abuse are as follows:

Ronald J. Dougherty, M.D., *Chairman*	Onondaga
Richard S. Blum, M.D.	Nassau
Sidney S. Greenberg, M.D.	New York
Sanford A. Kaplan, M.D.	Westchester
Anthony Markello, M.D.	Erie
Stephen Nordlicht, M.D.	New York
* Russell I. Heigh	Onondaga
Mr. David Solomon, *Advisor*	Albany

1982 demonstrated much of the same type of drug use and abuse in New York State as in 1981 with regard to alcohol, marijuana, and hallucinogens. Solvent and inhalant abuse appeared to level off or slightly decrease.

There were considerable changes in the following categories: sedative/hypnotics, stimulants, and narcotics.

Sedative/Hypnotics. On January 1, 1982, the short-to intermediate-acting barbiturates (Secobarbital, Amobarbital and Pentobarbital) were placed on the Schedule II triplicate prescription category. This brought New York State in federal compliance since these drugs had been on the Schedule II category with the federal government for quite some time. Barbiturates alone or in combination nationwide have been responsible for at least 20 percent of all accidental drug deaths and 15-20 percent of the 30,000 suicides reported in this country every year. Prior to the rescheduling of the barbiturates in New York State, practicing physicians had been made aware through various mailings of the proposed amendments from the various state, federal, and voluntary agencies. This might very well have initiated some change in the prescribing habits of practicing physicians of this category of drugs before the January 1 law came into effect.

During 1981, there was a dramatic decrease in emergency room visits in New York State because of short— to intermediate-acting barbiturate overdoses, and there was a definite decrease in autopsies as a result of overdose or suicide from these agents. At the same time that there was a decrease in ER visits and deaths from this group of drugs, other non-barbiturate emergency and autopsy reports as a result of the consumption of sedative/hypnotics continued to rise in New York State. There is no doubt that placing the short— to intermediate-acting barbiturates on Schedule II triplicate prescription impacted on the prescribing habits of physicians, but there may, in fact, be other reasons why there were fewer emergency room visits and deaths from these agents. In anticipation of a decrease in prescribing habits of a particular drug by physicians, pharmacies tend to stock less of a particular drug; therefore, when drugstore robberies occurred, there would obviously be less of these barbiturates being subsequently sold or dispensed into the street population and therefore less to overdose and result in emergency room deaths.

By the same token, many physicians practicing in New York State do not carry triplicate prescriptions in their office; therefore, those physicians, clinics, nurse stations, etc., where conventional prescription pads are left for the enterprising substance abuser to steal, the consequent forgeries would have to be for drugs other than the short— to intermediate-acting barbiturates since these can only be honored on triplicate prescriptions. Those physicians who do make use of the triplicate prescription in New York State tend to guard them with more caution than the conventional prescription pad.

The Benzodiazepines (Valium, Librium, Tranxene, etc.) no longer enjoy the status of being the most frequently prescribed drugs in the country, but rather have dropped to number four or five at this time. There is definitely a greater tendency on the part of physicians who are writing for conventional sedative/hypnotics to write them for smaller amounts and for shorter periods of time than had their forebears of one or two decades ago. There also appears to be a greater trend on the part of physicians to encourage patients to use naturally occurring substances such as L-tryptophan, and to employ biofeedback and/or relaxation techniques as a mechanism of coping with insomnia.

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* Medical Student

Stimulants. Stimulants continued to be less frequently prescribed in New York State in 1982. In 1981, the New York State Health Department, with the approval of the Medical Society of the State of New York, placed a restriction on the prescribing of amphetamines in New York State. Amphetamines, which had been on Schedule II triplicate prescription for a considerable period of time, now had as a provision that they could no longer be written by providers for weight control. There was a considerable drop in the prescribing of these agents. In 1979, there were 429,000 triplicate prescriptions written for amphetamines in New York State representing 58 percent of the total (723,000) prescriptions written that year. A downward trend began in 1980 to 221,000 and a total of 111,000 for the year of 1981 with only 15,000 prescriptions for the amphetamine group being written in the last three months of 1981. Physicians can still write prescriptions for amphetamines for conditions including narcolepsy, minimum brain dysfunction, as an adjunct to narcotics in the treatment of terminal cancer and other nondefined medical conditions; the only condition for which they cannot be prescribed in New York State is for use in weight control.

1981 and 1982 have seen an epidemic of amphetamine look-alikes or pseudo-speed abuse. The three most common drugs of abuse by adolescents rank in order: alcohol, marijuana, and pseudospeed. Pseudospeed is the generic term applied to capsules and tablets containing various combinations of noncontrolled drugs such as phenylpropanolamine hydrochloride, caffeine, and ephedrine. In 1980, there came on the scene such over-the-counter preparations as Dietac, Dexatrim and Control, containing relatively small amounts of these substances which were directed toward the adult population interested in a nonprescription appetite suppressant.

Enterprising "garage laboratories" found that there existed a ready market and began mass production of look-alikes or pseudospeed. These pills or capsules look exactly like the legitimately produced pharmaceutical amphetamines, but instead contain various amounts of noncontrolled substances. They have been advertised widely in various bulletins and magazines directed primarily toward the youthful drug-consuming public. Some of these capsules have been offered for as little as $10/1,000. Most of them appeared to be coming from the State of Pennsylvania which in the spring of 1982 became the 15th state to legislate against the production and sale of pseudospeed or look-alike drugs. Phenylpropanolamine is an amphetamine-like substance widely available in over-the-counter preparations for relief of cold and flu symptoms. It is a centrally active drug that can cause severe hypertension and hypertensive crises and cerebral vascular accidents. Medical literature has reported several cases of psychotic episodes after patients take even a relatively small amount of this substance. Symptoms can range anywhere from mild anxiety and agitation to a marked state of hallucinations, and, in some cases, fatal cerebral vascular accidents. Caffeine has long been associated with sleep disturbance, anxiety, gastrointestinal irritation and ulceration; many of the look-alikes contain varying amounts of caffeine, in some instances as much as 200 mg. of caffeine per capsule. Many of the naive substance abusers, believing that these drugs, because they are inexpensive, therefore must not be very potent, tend to take them by the handfuls, in many instances gobbling down as many as 20 per day or the caffeine equivalent of 20-40 cups of coffee. There have been several bills proposed in the New York State Legislature ranging from making it a crime for knowingly manufacturing, processing and packaging substances which resemble a specific controlled substance to other proposed laws making it a crime to distribute or sell any substance other than a prescription drug wherein the expressed or implied representation of the look-alike is that it is a controlled substance or that the recipient could pass it off as such. The American Medical Association has recommended that all state medical societies support legislation aimed at controling the traffic in look-alikes.

Narcotics. Although heroin use resulted in a rise in Emergency Room visits from 1,944 visits in 1979 to 3,740 visits in 1980, representing a 92 percent increase in ER visits in New York City, there appeared to be some leveling off to only a 16 percent increase in 1981. Autopsies from heroin deaths in New York City increased by some 117 percent between 1979 and 1980, but appeared to be about stable for the year 1981. Hepatitis of the serum variety has jumped from 1979 to 1980 by 18 percent and it had continued to rise another 54 percent through 1981. Usually a fair indication of intravenous use of narcotics, or an association with those individuals using narcotics, is this subsequent rise in infectious B-Hepatitis.

The quality of heroin overall appeared to be about stable in New York City during 1981, with periodic confiscations of some heroin being a very high percentage. For instance, in the latter part of 1981 and in February of 1982, Turkish White Heroin was confiscated which was found to be 85 percent pure. Most heroin being sold in New York City seemed to fall in the 3-4 percent purity range.

Although Talwin in combination with Pyribenzamine (T's & B's or T's and Blues) has increased in use in cities such as Buffalo, Rochester, and Syracuse, this appears not to be the case in New York City. Talwin tablets, abused by being dissolved and injected along with the antihistamine Pyribenzamine, appears to be a regional phenomenon. For instance, there appears to be very little of this going on in the Albany or Utica area, but it is quite prevalent in Syracuse, more pronounced in Buffalo, and increasing in the Rochester area. Although Talwin-related Emergency Room visits have increased significantly, there has not been a substantial number of increased Talwin fatalities reported. There have been legislative efforts proposed to place Talwin on Schedule II in New York State. This would appear not to be a wise move for two reasons. Talwin is not a Schedule II drug in the states adjacent to New York. It is felt by many that placing Talwin on Schedule II in New York would simply produce the same phenomenon that occurred in Illinois; that is, the numbers of prescriptions in that particular state decreased, but the amount of the drug abused did not decrease since there was more of the drug being brought in from Wisconsin. Many of the recent narcotic arrests occurring in the Syracuse area have revealed that the Talwin confiscated there came from Pennsylvania, and not from cities within New York State.

Additionally, Sterling Winthrop has requested a new investigation of new drug (I.N.D.) status for Talwin with the Food and Drug Administration (FDA), wherein a small amount of Naloxone would be attached to each Talwin tablet. In the event that the street drug abuser would dissolve the new pill and inject it either intravenously (IV) or intramuscularly (IM), narcotic withdrawal would ensue, or the person would not achieve any of the desired euphoria for which he injected the drug to begin with. The FDA has indicated that they felt that this new formulation would be on the market sometime in the fall of 1982. Many in the field of drug treatment and rehabilitation feel that Sterling Winthrop should be commended for their pioneer effort in making a drug which has legitimate oral use less desirable to the street drug addicts by adding to it an antagonist which would make the unprescribed route an unpleasant experience for the substance abuser.

Other Schedule II through IV narcotics in New York State appear to have about the same degree of abuse in 1981 as in prior years. Propoxyphene (Darvon) continued to be the leading narcotic drug of overdose death in Onondaga County. This substance never was a cause of death when taken in prescribed doses, but it is very often taken in large quantities by prescription drug abusers and in some instances by patients with chronic pain syndromes. Dihydromorphone (Dilaudid) continued to be the Cadillac of narcotics which when sold by prescription only cost 14¢, but when sold on the streets brought as much as $30 a tablet.

It remains to be seen whether the newer narcotics such as Nubain and Stadol will follow the patterns of other narcotics in the past which have been treated with great praise upon their discovery only later to find out that they, too, had great potential for abuse.

Respectfully submitted,

Ronald J. Dougherty, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Drug Abuse be filed for information.

⟹ . . . *The report of the Committee on Drug Abuse was* **FILED FOR INFORMATION** . . .

EMERGENCY HEALTH SERVICES

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Emergency Health Services are as follows:

David N. Kluge, M.D., *Chairman*	Monroe
Irving G. Frohman, M.D.	Queens
John C. Herrman, M.D.	Lewis
Norman Morris, M.D.	Kings
John E. Spoor, M.D.	Otsego
Sheldon Zuckerman, M.D.	Nassau
* John Stuhlmuller	Onondaga
Robert J. Huszar, M.D., *Advisor*	Albany

Physician training in CPR continues to be a basic goal of this Committee. The American College of Emergency Physicians has been designated by the American Heart Association to be a certifying organization for this training which should be repeated at yearly intervals. New CPR requirements have become mandatory this year for reregistration of a physician's license in California.

During this year, "advanced cardiac life support" (ACLS) and "advanced trauma life support" (ATLS) courses have been held in this State. The Committee desires the prerequisites of ACLS and ATLS training to be required of the directors of all emergency departments and the medical directors of all advanced life support systems in New York State. At its meeting on April 22, 1982, the Council approved the following amended recommendation:

> That the prerequisites of ACLS and ATLS training be recommended for the director of the emergency room and the medical director of the advanced life support system in any community before heading such a department.

The Council recommended that a Position Paper relative to these prerequisites be developed by the Committee, to be included in the MSSNY Manual of Official Position Papers.

Prehospital training of emergency medical technicians is also a basic goal of the Committee. The New York State budget should include financial support for these basic life support and advanced life support courses. The Council disapproved this recommendation at its meeting on April 22, 1982. New York hospitals must provide structured clinical exposure to these sophisticated techniques so that paramedics will provide us with proper, high quality care. Physicians who influence hospital decision-making must keep this in mind.

The Committee discussed new legislation, introduced in February, on CPR performance techniques as part of the secondary schools curricula. The bills would require CPR training as an integral part of the required health education course at the senior high school level. The bills are S.8029 (Solomon, et al) and A.9993 (Wilson). A motion was made:

> That the Committee recommends the MSSNY support Bills S.8029 and A.9993.

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* Medical Student

The motion was duly seconded and passed unanimously by the committee. At its meeting on April 22, 1982, the Council discussed the concept of mandated programs, and approved the concept of voluntary training in cardiopulmonary resuscitation (CPR) as an integral part of the required health education course at the senior high school level.

The Committee felt that a basic goal of all emergency medical care was necessary in the pursuit of excellence and has adopted the following:

Basic Life Support services should be available within four minutes and Advanced Life Support services within ten minutes.

Although the attainment of this goal is difficult in rural areas, in high density traffic, in crowds, and in multiple casualty situations, it should always be kept in focus. Thus by proper training of all New York State high school graduates, all ambulance and rescue personnel, and all New York State physicians — the goal is theoretically achievable and will be pursued by this Committee. This recommendation was disapproved by the Council at its meeting on April 22, 1982.

The Committee discussed the issue of immediate identification of physicians at the scene of an emergency; Minutes count! A motion was made:

That MSSNY encourage physicians to carry their medical society membership card for official recognition at the site of a medical emergency.

At its meeting on April 22, 1982, the Council approved the above recommendation.

It was noted with sorrow the untimely deaths of two physicians this year who were prominent in the field of emergency care: Dr. Julius Duic, recent Past President of the New York State Chapter of the American College of Emergency Physicians, and Dr. Ronald Holloway, former Director of EMS for the Health and Hospitals Corporation of New York City.

The Committee again wishes to emphasize its support of nonremovable flip tops to prevent foot injuries and the aspiration of these flip tops. We support stricter enforcement of handgun laws and mandatory sentencing in cases of illegal possession and use of guns. We are also in favor of stricter enforcement of DWI laws and are pleased that state and national attention has been turned to these aspects of accidental deaths.

The Committee urges all members to actively pursue these goals in their daily involvement with patients, hospitals, and legislators.

Respectfully submitted,

David N. Kluge, M.D., *Chairman*

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⇒ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⇒ Your reference committee recommends that the report of the Committee on Emergency Health Services be filed for information.

⇒ . . . *The report of the Committee on Emergency Health Services was* **FILED FOR INFORMATION** . . .

ENVIRONMENTAL QUALITY

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Environmental Quality are as follows:

Ronald Stritzler, M.D., *Chairman*	Queens
Ephraim J. Felderman, M.D.	Nassau
Milton M. Greenberg, M.D.	Kings
Louis A. Sasso, M.D.	Richmond
Donald K. Stockdale, M.D.	Monroe
Donald B. Thomas, M.D.	Erie
* Stephanie D. Duke	Westchester
Nicholas Vianna, M.D., *Advisor*	Albany

A meeting of the Committee was held on October 20, 1981. The following items were discussed:

I. The Clean Air Act (National)
II. The Bottle Deposit Bill (State)
III. The problem of pollution in homes and offices
IV. "Physician and Public Education on the Consequences of Nuclear War" Resolution 3,I-80, introduced before the House of Delegates of the AMA by the six New England States.
    A. MSSNY House of Delegates Resolution 81-31, "Workshop for Management of Nuclear-Related Injury." The resolution as amended by the Reference Committee now reads:

> "**Resolved,** That the Medical Society of the State of New York recognize the need for the education and re-education of physicians in New York State in the medical and surgical management of nuclear– and isotope-related injuries and contamination."

Item I.

The Clean Air Act, which is due to expire in 1982, has been threatened with major changes. The AMA supports the "purposes and objectives" of the Clean Air Act. A future meeting devoted to this subject was planned, but not called.

Item II.

The "Bottle Deposit" Bill was discussed and supported by the Committee. The Council has given support to this legislation. The Committee Chairman would like to point out that it is in his opinion most appropriate for us to support such a bill (and the Clean Air Act) for substantive reasons, and that such support by our Medical Society should be publicized.

Item III.

Pollution in homes and offices has been a problem in the State. Formaldehyde foam insulation is the best known of recent interior pollutants, but other sources have come to our attention and will be considered at a future meeting.

Item IV.

The Committee discussed the possibility of either a nuclear war or nuclear accidents and the special medical care that would be required in the event of either one. A motion was passed by a 2-to-1 vote:

"That the MSSNY give its support to Resolution 3, I-80, "Physician and Public Education on the Consequences of Thermonuclear Warfare," through the New York Delegation to the AMA."

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* Medical Student

At its meeting on November 12, 1981, the Council approved the Committee's recommendation. The AMA passed a resolution to bring to the attention of the President and the Congress the medical consequences of a nuclear war.

Item IVa.

Referring to House of Delegates Resolution 81-31, as amended, which was approved by the Council at its meeting on November 12, 1981, the Chairman is in the paradoxical position of being totally opposed to this resolution (for which he voted) if in any way it implies that physicians should participate in any civil defense activities in preparation for a nuclear war (as opposed to preparation for nuclear catastrophe from an accident in a nuclear electrical generation plant or nuclear industrial facility, which he supports). Civil defense for a nuclear war is more dangerous than no civil defense at all. Why? It creates the illusion, that meaningful medical aid could be protective, could lead to survivability — a totally specious conception that would deflect energies from preventing a nuclear war. Furthermore, the current civil defense strategy of "crisis relocation" could in itself trigger an attack (satellite detection of evacuation interpreted as an impending attack and the potential enemy launching first).

I realize the above is controversial and the Council may find this difficult to publish among the Committee annual reports; however, the Chairman requests one hour of the Council's time, a 16 mm. projector, and a screen to try to convince them of his point of view.

Respectfully submitted,

Ronald Stritzler, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Environmental Quality be filed for information.

⟹ . . . *The report of the Committee on Environmental Quality was* **FILED FOR INFORMATION** . . .

FORENSIC MEDICINE

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Forensic Medicine are as follows:

Sidney B. Weinberg, M.D., *Chairman*	Suffolk
Michael M. Baden, M.D.	New York
Dominick J. DiMaio, M.D.	Kings
Elliot Gross, M.D.	New York
Leslie I. Lukash, M.D.	Nassau
Gary Paparo, M.D.	Westchester
Robert L. Sullivan, M.D.	Schenectady
* Paul Romanello	Onondaga
George M. Warner, M.D., *Advisor*	Albany

* Medical Student

The Committee on Forensic Medicine discussed ways and means of possible reimbursement for postmortem examinations in medical-legal cases not performed in hospital settings. Dr. Myron Siegel of New York Blue Cross-Blue Shield was invited to speak to the Committee and advised the Committee about possible approaches to reimbursement by third party carriers. Dr. Warner, a member of the State Health Department, who is also the advisor to the Committee, reported on the issue of possible reimbursement and coverage under Medicare or Medicaid, and explained that reimbursement would not be covered because the service is not given to a living person. In the State Standards for Hospitals 405.1023, Section (b) Standard; autopsies, there is a requirement for "medical staff to attempt to secure autopsies in all cases of unusual deaths . . ." Thus, reimbursement for postmortems performed in hospitals is allowed. Dr. Warner also indicated, however, that there have been some services allowed under Medicare and Medicaid which are not normally allowed, in the Federal Demonstration Hospice Program. He pointed out that this could possibly set a precedent for the reimbursement for postmortem autopsies outside of the hospital. It was suggested that the Committee study the definition of what constitutes medical necessity to see if postmortems fit in there. The Committee would also like to compare the relationship between the hospital and the pathologist and that of the hospital and the medical examiner.

The history and background of the subsidization of Medical Examiners Offices by the State Health Department was discussed. The question of the future rate of reimbursement which at present is up to 50 percent, and the curtailment and apparent reduction of the reimbursement rate, because of Federal and State fiscal problems, was also discussed.

An important issue was the medical-legal resources available throughout New York State and the dearth of resources in certain areas of the State. The possibility of establishing a Statewide registry of Forensic Pathologists, who would be consulted and available throughout the State in medical-legal cases, is being considered and will be further developed at future meetings.

The Committee also discussed and reevaluated its functions, responsibilities, and scope of activities. The Committee hopes to enlarge and diversify its membership to include those physicians doing medical-legal work, whether they be Coroners, Medical Examiners or Forensic Psychiatrists, rather than restrict its point of view primarily to Forensic Pathologists.

The Committee also considered new pieces of legislation which are felt to be germane to the Committee's activities, and also proposes to address future meetings to previous proposals and projects and unfinished business.

Respectfully submitted,

Sidney B. Weinberg, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Forensic Medicine be filed for information.

⇒ . . . *The report of the Committee on Forensic Medicine was* **FILED FOR INFORMATION** . . .

HEALTH CARE IN CORRECTIONAL INSTITUTIONS

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Health Care in Correctional Institutions are as follows:

Russell C. Johnson, M.D., *Chairman*	Orange
Myron A. Fribush, M.D.	Broome
Herbert Moskowitz, M.D.	Nassau
Stephen Nordlicht, M.D.	New York
Elwood Weisenburn, M.D.	Greene
* Theodore M. Mazer	Onondaga
Gustave Gavis, M.D., *Advisor*	Albany
Mrs. Barbara Maguire, *Advisor*	Albany

The Committee met on February 23, 1982. Since the last annual report, there were no resolutions or matters referred to this Committee by the House of Delegates.

The State Prison Inmate Health System Program Audit, dated June, 1981, was reviewed and discussed. The major problems identified in this report to the State Legislature were lack of health professionals involved in the care, as well as the many institutions which were in noncompliance with national standards of health care in State Correctional Facilities.

Our Committee restated its concern regarding the inactive status of the Jail Health Project and the lack of strong leadership from the medical profession. In May, 1981, Dr. Siegel wrote to the State Commissioner on Corrections, Kevin McNiff. This letter never received a response. Despite this lack of administrative response, the Committee felt strongly that another letter should be written to Commissioner McNiff, again offering to give guidance in the form of establishing and updating the standards and accreditation process.

Members of the Committee expressed concern with the morale of physicians who work in correctional facilities. Many of these physicians feel unsupported by their peers and even alienated from medical practice as a whole. There is a lack of communication and cohesion among the physicians who work in these institutions. It was recommended to seek the support of County Health Officials to provide opportunities for these physicians to meet and discuss problems. Dr. Johnson brought this topic to the attention of the New York State Association of County Health Officials with the aid of Mr. Lawrence Rose who showed the movie, "Out of Sight, Out of Mind."

Future involvement of this Committee in the Jail Health Project will depend upon the support staff of the American Medical Association and the American Health Care Consultants, Inc.

Respectfully submitted,

Russell C. Johnson, M.D., *Chairman*

⇒ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

The annual report of the Committee on Health Care in Correctional Institutions was reviewed. Russell C. Johnson, M.D., Chairman of the Committee on Health Care in Correctional Institutions, presented a brief description of the activities of his committee during the past year.

⇒ Your reference committee recommends that the report of the Committee on Health Care in Correctional Institutions be filed for information.

⇒ . . . *The report of the Committee on Health Care in Correctional Institutions was* **FILED FOR INFORMATION** . . .

During the hearing, your reference committee heard testimony concerning the morale of physicians who work in correctional institutions and the difficulty in recruiting such physicians due to the isolated nature of this work.

⇒ Your reference committee recommends that the Medical Society of the State of New York display support of these physicians through educational programs designed to encourage physicians to enter this field of practice.

⇒. . . *The House voted to* **REFER** *the recommendation of the reference committee to the Council for study* . . .

HOME HEALTH CARE AND HOSPICE

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Home Health Care and Hospice are as follows:

Lawrence Kryle, M.D., *Chairman*	Nassau
Anthony J. Altieri, M.D.	Bronx
Albert F. R. Andresen, Jr., M.D.	Westchester
Bruce E. Baker, M.D.	Genesee
Roger Boulay, M.D.	Monroe
Gerald D. Dorman, M.D.	New York
Nicetas H. Kuo, M.D.	Queens
Sheldon H. Putterman, M.D.	Queens
Jane C. Brady Wiles, M.D.	Erie
* Robert Burns, Jr.	Erie
George M. Warner, M.D., *Advisor*	Albany

The Committee met on March 23, 1982, and discussed the hospice programs that were, at present, operational in New York State. There are fourteen such programs; eleven are now operational. These include two federal demonstration programs at Cabrini Hospital and the Genesee Region Home Health Care Program. At present, these programs are being evaluated and a report will be ready, it is hoped, by the summer of 1983.

The nine programs, which are not funded by the federal government, do not receive Medicare funding; they depend on state and local philanthropic monies for their operational costs.

In reference to Resolution 81-36, "Home Health Care

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* Medical Student

Aides and Reimbursement for Same," the New York State Department of Health is, at present, in the middle of a three-pronged evaluation, which will attempt to gather information on Home Health Care Programs and Hospice Programs. Statistical data are being gathered through questionnaires from the patient and family. This study should be finished by the early part of 1983 and a further report will then be made.

Blue Cross/Blue Shield of Greater New York has home health care coverage, as well as hospice coverage, available to its subscribers. Only three to four thousand claims were paid during the past year, in spite of the fact that there are eight million subscribers now with home health care coverage. This is probably due to the fact that most of the subscribers are younger people and do not have actual need for home health services at this time.

An article has been written by myself and Ms. Shirley Turner of Blue Cross/Blue Shield of Greater New York to be included in a forthcoming issue of "Fast Facts," and we hope that an article may then be available for publication in the *New York State Journal of Medicine*. The purpose of the *Journal* article is to make physicians of the State of New York aware of this available coverage. Blue Cross/Blue Shield of Greater New York also has six demonstration hospice programs at North Shore University Hospital, Manhasset; Long Island Jewish Medical Center, Queens; Mercy Hospital, Rockville Centre; St. Luke's-Roosevelt Hospital Center, New York City; United Hospital of Port Chester, Westchester; and Cabrini Hospital, New York City.

The recognition and certification of proprietary home care agencies was discussed, and it was felt that eventually these agencies must be recognized and certified in order to protect the public, as most of them are actually being used by the public without certification. Certainly, any third party payor will insist on a certified agency to be involved in home care.

A demographic study, using the certificate of need methodology, is being undertaken by the New York State Department of Health to determine the actual need for home health care programs in various parts of the State. It is hoped that in early 1983 a report of this study will be made available to the Committee.

Respectfully submitted,

Lawrence Kryle, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Home Health Care and Hospice be filed for information.

⟹ . . . *The report of the Committee on Home Health Care and Hospice was* **FILED FOR INFORMATION** . . .

INFORMATION TECHNOLOGY IN MEDICINE

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Information Technology in Medicine are as follows:

William A. Bauman, M.D., *Chairman*	New York
Ralph L. Engle, Jr., M.D.	New York
Elemer R. Gabrieli, M.D.	Erie
Robert M. Klein, M.D.	Westchester
Leon Pordy, M.D.	New York
Charles T. Ryder, M.D.	New York
Arthur A. Stein, M.D.	Albany
* Chak Tom	New York
Stephen Kim, Ph.D., *Advisor*	Albany

The Committee continues to receive reports of experiments that use disease-related group methodology (DRGs) to determine hospital reimbursement. The Committee is displeased with groupings that classify patient's illnesses based on cost rather than on medical findings. Criticism has been voiced also by the Association of American Medical Colleges which has developed and tested a medically oriented classification system based on 400 disease entities. Each entity is further modified by classifying it into one of four stages, depending on severity, making 1,600 categories into which a patient's condition can be classified. The Association's disease-staging case mix study succeeded in staging 554,00 patients discharged during 1978 from 24 teaching hospitals. The magnitude of the project and the heavy data handling requirements could only be managed with computer technology. The Committee on Information Technology in Medicine commends the Association of American Medical Colleges and urges continued experiments with classification systems that reflect the extent of medical care rather than costs.

The Statewide Planning and Research Cooperative System (SPARCS), under the aegis of the Department of Health of New York State, continued to operate during 1981–82; their Data Protection Review Board, with representatives from hospitals, health insurance, government and consumers, screens requests for information in order to protect the public and yet make necessary data available. The Board has recently wrestled with the determination of whether or not the names of specific hospitals should be considered as deniable data elements, as are the name of the patient and the name of the physician. The Committee has received a report from the MSSNY representative to the Board, Dr. Arthur Hengerer. He states that the 15-member board meets monthly and is a well-organized, efficient, and critical component of SPARCS. The Board reviews applications for data release and thoroughly considers each request, making every effort to assure privacy and confidentiality.

At its last meeting, the Committee considered a detailed proposal for the Medical Society of the State of New York to assume leadership in systematizing clinical nomenclature. The confusion brought about by attempts to classify diseases and findings in a logical, retrievable, and consistent manner compatible with the discipline required for computer input continues unresolved after two decades of attempts to automate information systematically for the medical record. A uniformly accepted terminology and classification scheme is required for electronic communication. The Committee urged that systematized medical language be developed. Dr. Gabrieli proposed that the Medical Society of the State of New York assume leadership in systematizing clinical nomenclature. The process would require cooperation from the academic medical community, as well as from the administrative and political members of our health care system. Experts in linguistics and information systems would be required. The language should become the national standard. The Committee agreed that a computer-oriented classification of biomedical terms is highly desirable, but warned of problems of concurrence among health personnel and ability to enforce such standards. The Committee will continue to evaluate methods to standardize medical nomenclature in order to facilitate the use of electronic information processing equipment.

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* Medical Student

The Committee made and passed a motion:

> That the Medical Society of the State of New York explore the interest and willingness of the national specialty groups to cooperate on the development of a semantic organization of human diseases, before proceeding any further on this project.

The Council approved the Committee's motion at its meeting on March 25, 1982.

The Committee held its meeting in February and will continue to keep abreast of technical developments in information technology, particularly as they apply to the membership of the Society. The Committee expresses its gratitude to Dr. George Lawrence, Mrs. Elizabeth Daepp, Miss Cynthia Mustapich, and staff for their encouragement and support during the year.

Respectfully submitted,

William A. Bauman, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Information Technology in Medicine be filed for information.

⟹ . . . *The report of the Committee on Information Technology in Medicine was* **FILED FOR INFORMATION** . . .

LIAISON COMMITTEE WITH NURSING

To the House of Delegates, Ladies and Gentlemen:

The members of the Liaison Committee With Nursing are as follows:

Grace A. Altenau, M.D., *Chairman*	Kings
Suzanne Howe, M.D.	New York
Charles R. Messeloff, M.D.	New York
Joseph M. Miranda, M.D.	Suffolk
Michael H. Posner, M.D.	Orange
A. Thomas Pulvino, M.D.	Wayne
Charles F. Schiffer, M.D.	Rensselaer
Julia L. Freitag, M.D., *Advisor*	Albany

The newly appointed Liaison Committee With Nursing held its first meeting on December 1, 1981. Five doctors were present and two nurses attended as advisors. Those present included: Dr. Suzanne Howe of New York County; Dr. Charles Schiffer of Rensselaer County; Dr. George Lawrence, Director of the Division of Scientific Activities of MSSNY; Dr. Edward Siegel, Executive Vice-President of MSSNY; Dr. Grace Altenau of Kings County, Chairman; Mrs. Ruth Harper, R.N., Executive Director of District 14 of the Nurses Association of the Four Counties of Long Island; and Mrs. Lola Lipani, R.N., retired, formerly with the United States Post Office.

The Committee was glad to note that some other counties have already established nursing committees. These include: New York, Bronx, and Dutchess Counties.

The Committee discussed several issues currently of concern to both nurses and physicians. Reportedly a number of bills are due to come before the New York State Assembly and Senate on the issue of nurse practitioners and expanding the responsibilities of the nursing profession. Basically, MSSNY is opposed to these bills as they are presently worded. MSSNY feels that the bills are too vague and loose so that multiple interpretations are possible and will cause dissension later on between the two professions. Another item of interest is the 1985 proposal by the New York State Nurses' Association for eliminating the diploma schools and requiring an Associate Degree to qualify a licensed practical nurse (LPN) and a Baccalaureate Degree to qualify a registered nurse (RN). Both the nursing profession and the medical profession are concerned with continuing education and furthering the competency of health care professionals. However, MSSNY is concerned that these bills will eliminate the system of checks and balances that helps maintain the different roles among health care professionals. A great cause for concern is the possibility of nurse practitioners overstepping the bounds of their competency. Easy accessibility to health care is of the utmost importance; however, that care must be properly delivered and monitored.

Drs. Altenau, Howe, Schiffer, and Lawrence attended the second Liaison Committee with Nursing meeting on March 12, 1982. Dr. Schiffer provided a listing of guidelines for the Liaison Committee with Nursing as follows: 1) serve as continuing communication between New York State Nurses Association and the Medical Society of the State of New York, 2) promote the development of liaison committees between nurses and physicians on a local level, 3) assist in the understanding of the expanding role of nursing in general and specific nursing specialty care (oncology nurse, critical care nurse, and dialysis nurse), 4) consider recommendations to State medical and nursing schools for curriculum changes to include early exposure to the roles and problems of nurses and physicians, and 5) assist the State of New York in establishing appropriate guidelines for interdisciplinary practice.

The Committee agreed that input from the nursing profession is required in order for the Committee to be truly effective. The Committee proposes to recruit representatives from three distinct areas of nursing: the New York State Nurses Association, a director of nursing from a hospital, and a floor nurse who is in direct contact with physicians and patients. A motion was made and passed unanimously:

> That the Committee be permitted to have three nurses to serve as advisory representatives and that the Committee be permitted to select these representatives.

At its meeting on April 22, 1982, the Council amended the Committee's recommendation and approved it as amended. The approved motion reads as follows:

> That the Committee be permitted to have three nurses to serve as advisory representatives and that the Committee be permitted to recommend these representatives to the President for appointment.

As previously noted, the Committee was pleased to learn that some county medical societies have established nursing committees and would like to see others follow suit. The Committee will offer its assistance to the county medical societies and recommended:

> That the President of MSSNY write to the county medical societies encouraging them to set up similar liaison committees with nursing.

At its meeting of April 22, 1982, the Council approved this recommendation.

The Committee is working on guidelines for its future functions. Part of its responsibilities include: 1) providing a forum for the discussion of problems of mutual interest to nurses and physicians in New York State, and 2) disseminating any findings throughout the State. The Committee is considering holding an educational program for physicians, nurses, and other interested parties in the future.

Respectfully submitted,
Grace A. Altenau, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Liaison Committee With Nursing be filed for information.

⟹ . . . *The report of the Liaison Committee With Nursing was* **FILED FOR INFORMATION** . . .

MATERNAL AND CHILD HEALTH

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Maternal and Child Health are as follows:

Roderick McLean, M.D., *Chairman*	Onondaga
Richard Harold Aubry, M.D.	Onondaga
Peter A. M. Auld, M.D.	New York
Louis S. Blancato, M.D.	New York
John F. Dwyer, M.D.	New York
Myron Gordon, M.D.	Albany
Robert Gordon, M.D.	Kings
Rita Gilman Harper, M.D.	Nassau
Harold W. Mayberger, M.D.	Nassau
John Monteleone, M.D.	Queens
Richard E. Murphy, M.D.	Clinton
Donald P. Swartz, M.D.	Albany
Walter Walls, III, M.D.	Erie
* Hindi Mermelstein	Onondaga
Solbritt Murphy, M.D., *Advisor*	Albany

The scope of the activity of the Committee on Maternal and Child Health of the Medical Society of the State of New York, as defined by the Division of Scientific Activities, designates that the Committee investigate maternal and perinatal mortality, prepare an annual report detailing maternal mortality, maintain a continuing awareness of current trends and practices developing in the field of Obstetrics and Perinatology, prepare educational articles for publication in the *New York State Journal of Medicine*, and act as consultants to the New York State Department of Health in formulating policy-making decisions.

In January of 1979, funding for this Maternal Mortality and Morbidity Study Project was terminated by the New York State Department of Health, which had been supplying the Empire State Medical, Scientific, and Educational Foundation with funds for this study. This was the result of a cutback in the State Health Department budget. Two grant proposals have been submitted to the Health Department for their approval during the past two years, both of which have been denied. The Division of Scientific Activities of the Medical Society of the State of New York, as well as the Maternal and Child Health Committee, has been working on further grant proposals, but to date no proposals have been accepted.

The termination of this project has been the grave concern of members of the Maternal and Child Health Committee of the MSSNY, as well as the American College of Obstetricians and Gynecologists, the American Academy of Pediatrics, the American Academy of Family Practice, and other Medical Society Maternal and Perinatal study committees throughout the United States. At no time in the history of medicine has it been more important to review and analyze the results of our medical care, especially when out-of-the-hospital births are on the increase, as are vaginal deliveries following Caesarean sections, and methods of care and health code changes are occurring. Statistical recordings are not enough. Accuracy of interpretation can only be accomplished by intensive review and analysis. These specialty groups involved in maternity care are offering their support to this project, and we now ask the Health Department to reinstate its support to our Maternal and Perinatal Mortality and Morbidity study.

A Special Governor's Committee is vitally interested in the outcome of pregnancy, as is the New York State Department of Health. It is only with a Statewide, detailed review and analysis of morbidity and mortality that we can truly determine the factors that influence the outcome of pregnancy in New York State.

In the past few years major developments have greatly influenced maternal and child health care. Many improvements and changes have been instituted. Research, technology, and public opinion have created many alterations in maternity and newborn care. If we, as physicians, are to accept these new trends and developments in medical care, the results must be carefully analyzed. If the new methods and trends are beneficial, they will prove themselves. However, if they are detrimental to the outcome of pregnancy, the records will make it evident. By this mechanism, and only by this mechanism, can we ever justify the standards and practices of the medical profession.

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* Medical Student

Respectfully submitted,

Roderick McLean, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Maternal and Child Health be filed for information.

⟹ . . . *The report of the Committee on Maternal and Child Health was* **FILED FOR INFORMATION** . . .

MEDICAL ASPECTS OF SPORTS

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Medical Aspects of Sports are as follows:

Donald T. Kasprzak, M.D., *Chairman*	Clinton
Albert B. Accettola, M.D.	Richmond
Arthur M. Bernhang, M.D.	Suffolk
Herbert Bessen, M.D.	Putnam
Kenneth E. DeHaven, M.D.	Monroe
William A. Dolan, M.D.	Monroe
Rodney Dusinberre, M.D.	Tompkins
Louis N. Frankel, M.D.	Nassau
Robert M. Israel, M.D.	New York
* Iris Schlesinger	Albany
Solbritt Murphy, M.D., *Advisor*	Albany

The Committee on the Medical Aspects of Sports met on April 20, 1982. The meeting opened with an excellent discussion on boxing. An outstanding presentation was made by Robert Swetnick, Counsel to the New York State Athletic Commission. Mr. Swetnick's presentation covered a variety of aspects concerning boxing with the main discussion centering on the new type of thumbless boxing gloves now mandatory in New York State in all four- and six-round bouts. The new type of glove was investigated quite thoroughly by Voigt R. Hodgson, Ph.D., Director of the Biomechanics Lab of the Department of Neurosurgery at Wayne State University. The glove has been modified and the padding is now made of a foam material as compared to the previous horse hair. The striking surface is wider as compared to the old type of glove. It appears that the new type of glove will cut down on eye injuries, such as detached retina, and will also help in preventing holding tactics during a bout.

The original objection to the new glove seems to be waning. The glove has been remodeled so as to eliminate thumb pain and numbness which were apparently present with the original model. These discomforts were eliminated by changing the bar effect across the web of the base of the thumb and the adjacent index finger. Several states, as well as Canada, have already professed an interest in the new glove and no doubt will adopt it.

Several interesting facts evolved during the general discussion:

a. Referees are well trained and are usually picked from the best handling amateur bouts. Referees are put through a training program in which they are taught to score fights, recognize seriously injured fighters and to stop fights before serious injury occurs, although this is not always an easy judgment to make, even by the most experienced referees. Interestingly enough, the pay scale of the referee ranges from a low of $35 to a high of about $150 dependent on the gate receipts.

b. The chief physician of the Boxing Commission is Dr. Edward Campbell who works with a panel of six or seven physicians who are all volunteers. Physicians who work at the ringside are compelled by New York State law to attend special courses at New York University which acquaint them with the type of injuries to anticipate and how to manage them. Attendance at a Neurologic Seminar is mandatory.

There apparently is considerable difficulty getting physicians to serve on a voluntary basis because of the medical-legal aspects involved. At present, the physicians are covered only by personal liability insurance. Attempts are being made through the legislature to make the ringside physicians employees of New York State, thereby passing the medical liability onto the State as opposed to the individual physician.

The average fighter before licensure in New York State must pass a routine physical examination. His evaluation also includes routine blood work, EEG, EKG, and chest x-ray. He must undergo and pass an annual physical thereafter. Five days before each bout he must undergo another physical, and, if warranted, must pass another physical the day of the bout, but this is usually waived. If a fighter is seriously injured, he cannot fight for a period of 45 days or longer if the physician deems it necessary as judged by the fighter's recovery from injury. The rule applies to winners as well as losers of a bout. A computer system is being considered as a method of cross-checking on all fighters on a nationwide basis, although at the present time the expenses involved make this impractical.

It is now also mandatory that oxygen, stretchers, and an ambulance be available at the fights. Interestingly enough, women are still eligible for licensure as boxers in New York State, and at present there are two licensed female boxers in the State.

It was unanimously expressed by the Committee that the Athletic Commission in New York State is doing an outstanding job much to the credit of Dr. Edward Campbell, his staff, and John Prenderville, Commissioner.

SOCCER

During the year several inquiries were made regarding the substitution rules in soccer, especially below the seventh

* Medical Student

grade level. There has been considerable concern about the length of the games and the red card penalty which forces a team to play short-handed when such a penalty is incurred. The Committee felt that rule changes should be made cutting down on the length of the games and allowing free substitution with the exception of disallowing a player to reenter the game in the same period in which he was removed. The Committee is awaiting the recommendation of the Safety Committee of the New York State Public High School Athletic Association, which is studying the problem, before any formal recommendations are to be made.

DEFINITION OF SPORTS MEDICINE

Several inquiries were made during the year as to the definition of what constitutes Sports Medicine. It is obvious that no one definition is acceptable to all. The definition set forth by Dr. A. J. Ryan, editor of the journal, *The Physician and Sports Medicine*, is as follows: "The field of Sports Medicine is generally conceived to include not only the medical and paramedical supervisor of the training and completion of the individual or team athlete or participant in recreational sports, but also the identification and provision of sports for those who are physically or mentally disadvantaged. The prescription and supervision of exercise programs to achieve and maintain physical fitness in the apparently healthy, and the use of exercise as a means of therapy for those who are not."

The American College of Sports Medicine defines Sports Medicine as follows: "A multi-disciplinary approach to dealing with the effect of sports and other motor activities on the health of human beings at various stages of life." The shorter definition was more favorably received.

SELECTION AND CLASSIFICATION

The program continues to work satisfactorily. The program is being moderated somewhat by Don Lindell from the Department of Education with a greater emphasis being placed on the "human factors" in the evaluation of candidates.

Dr. Bernhang reported that the United States Pony Club has made it mandatory that protective headgear be worn by all participants in all shows. This mandate was recommended by the Committee last year in support of Dr. Bernhang's efforts.

Several of the recommendations of the Safety Committee of the NYSPHSAA were discussed and favorably looked upon:

1. Hockey — suiting up at least 10 players for each game. Prior to this, there has been no set minimum number of players available to play.
2. Riflery — standard trigger pull set at 3.1 per the National Rifle Association for all rifles used in competition.
3. The use of spotters during the pole vault to prevent pit injury.
4. The use of a cage during the discus throwing event to prevent injury as the result of an errant throw.
5. Proper protocol in the reporting of all total or fatal injuries. The recommended process calls for the immediate reporting of the incident by the coach to the Athletic Director, with subsequent reporting to the School Superintendent and Principal. Reports should then be forwarded to the Section President and Section Safety Coordinator. The School Administrators are then to notify the NYSPHSAA and the insurance carrier.

The Chairman wishes to express his thanks to all the members of his Committee for their help and cooperation. A special thanks to Dr. George Lawrence for his cooperation and help during the year.

Respectfully submitted,
Donald T. Kasprzak, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Medical Aspects of Sports be filed for information.

⟹ . . . *The report of the Committee on Medical Aspects of Sports was* **FILED FOR INFORMATION** . . .

MEDICAL SCHOOL RELATIONSHIPS

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Medical School Relationships are as follows:

Richard N. Pierson, Jr., M.D., *Chairman*	New York
Hugh R. Barber, M.D.	New York
Duncan W. Clark, M.D.	Kings
Kurt Deuschle, M.D.	New York
Ira Greifer, M.D.	Bronx
Leonard Meiselas, M.D.	New York
John Naughton, M.D.	Erie
Lawrence Scherr, M.D.	Nassau
Stanford Wessler, M.D.	New York
William J. Williams, M.D.	Onondaga
Edward A. Wolfson, M.D.	Broome
Tamarath K. Yolles, M.D.	Suffolk
* Charles J. Cattano	Onondaga
Julia L. Freitag, M.D., *Advisor*	Albany
Mr. Frank Jones, *Advisor*	New York

The Medical School Relationships Committee of the State Medical Society is made up of representatives of each of the thirteen medical schools in the State and of additional members whose expertise is relevant to the charge of the Committee, as well as at large representatives of the State Medical Society with the capability of representing Society viewpoints on educational subjects.

The Committee addressed the issue of the training of medical students, enrolled at foreign medical schools, for major portions of their clinical training (third- and fourth- year studies) in hospitals in New York State. The Committee has designed and forwarded to the Council of the State Society a proposal to monitor the efforts of participating hospitals with regard to the number of and level of students participating, the internal staffing of the preceptorial programs designed to train those students, and the eventual disposition of those students into medical careers either in or outside of New York State. The Committee has attempted to recognize the rights and privileges of the physicians caring for patients in participating hospitals, the physicians involved as preceptors and teachers in these hospitals, the residency training programs under way in these hospitals, the medical students enrolled in American medical schools in the State, and the patients cared for in these hospitals whose cases serve as substrate for this clinical education. The Committee also recognizes, but does not represent, potential concerns of hospital trustees and non-physician hospital staffs.

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* Medical Student

The plan proposed to and accepted by the Council and Trustees of the State Society centers on the director of medical education in each participating hospital and seeks to enlist his or her cooperation by providing support services and an information network directed at understanding fully the responsibilities and risks of accepting such students for training and of their special needs. This need in part arises from the probability that hospitals unaccustomed to training medical students will see these young American men and women from foreign medical schools as competent members of the medical team.

The Committee has looked for areas in medical education which may not be efficiently served in present medical school curricula. These areas include: a full understanding of medical malpractice and behavior designed to reduce its impact, an appropriate and adjustable course or series of exposures on the subject of medical ethics, an efficient exposure to primary care training, and courses in geriatrics and alcoholism which emphasize less on creating specialists in these subjects than on preparing primary care physicians to incorporate basic precepts of these specialties into patterns of primary care delivery. Also on this agenda or "modern" curricula is attention to the regulatory agencies and the responsibility of physicians to participate in their deliberations prior to the formulation of laws.

In summary, this Committee of the MSSNY sees its responsibility as representing, on the one hand, the medical schools to the State Society — across the full range of the responsibility accepted by the Society to representative physicians. The reciprocal of this representation is also assumed: representing the needs of practicing physicians and their specific sensitivities of defects in the practice environment (malpractice, regulation as it affects practice, inadequate teaching of ethics in medical schools, etc.) to the deans of medical schools, *and their faculties*. It is our experience that each of these communities has a tendency to isolation, and to the extent that this tendency is realized, a potentially destructive, nonresponsiveness to the real issues of each other's environments exists. The long delay between what happens to medical students in medical schools and the results of medical education at the bedside sets a specific requirement for prescience and judgment, which is difficult to respond to in the political environment of changing leadership. This rapid turnover of leadership, which has always been a feature of state government, is unfortunately increasingly a feature of medical society leadership and medical school leadership. Delayed recognition of problems is never possible in the fiscal arena of budgets, but it dominates long-range planning. We respectfully draw your attention to these issues and to the work of the Committee.

Respectfully submitted,

Richard N. Pierson, Jr., M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Medical School Relationships be filed for information.

⟹ . . . *The report of the Committee on Medical School Relationships was* **FILED FOR INFORMATION** . . .

MENTAL HEALTH

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Mental Health are as follows:

Herbert S. Peyser, M.D., *Chairman*	New York
Harvey J. Bluestone, M.D.	Bronx
Abraham Halpern, M.D.	Westchester
Nadene Hunter, M.D.	Livingston
Edith Mila Jurka, M.D.	New York
Allison B. Landolt, M.D.	Westchester
William V. Lewit, M.D.	Westchester
Laurence Loeb, M.D.	Westchester
Judah Maze, M.D.	Nassau
Donald H. Schultz, M.D.	Ulster
* Larry Sandberg	Onondaga
Raymond Vickers, M.D., *Advisor*	Albany

The Committee on Mental Health met on November 6, 1981; January 22, 1982; and April 16, 1982. The first meeting was a joint meeting with the Committee on Psychiatry and Law of the New York State Psychiatric Association (NYSPA) of the American Psychiatric Association (APA) — Dr. Naomi Goldstein, Chairperson. Mr. Harold Smith, Director of the Bureau of Forensic Services of the New York State Office of Mental Health (OMH) was an invited guest, as was Dr. Radames Rivera-Vasquez, Director-Designate of the Forensic Psychiatric Institute of Puerto Rico. Both the MSSNY and NYSPA Committees had played a role in the development of the Governor's Law Revision Commission to reconsider the insanity defense and its consequences, and this had resulted in the Insanity Defense Reform Law of 1980.

Mr. Smith reviewed for us the state's forensic psychiatry program, the new forensic facility at Manhattan Psychiatric Center, and the results of one year of the operation of the Insanity Defense Reform Law. The Committee discussed the report then and at the next meeting in January. The new law had not changed the insanity defense, but did tighten up postverdict procedures. The result was a more than doubling of such acquittals to 124 in one year due to an increase in

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* Medical Student

District Attorney acceptance of plea bargains associated with the more restrictive postverdict procedures. The District Attorney also routinely opposed all furloughs and transfers to less secure facilities. This resulted in a markedly increased burden on OMH in terms of manpower and finances, one they were solely pressed to handle. Other problems with the law had emerged as well, such as the failure to adequately distinguish between the violent and the nonviolent institutionalized person. All this resulted in overcrowding of facilities, and some dangerous people being transferred out of maximum security facilities to make room for others, and some people being committed to the forensic hospital system who did not belong there. It seemed as though the courts and the criminal justice system were increasingly using the law to put and keep people in the hospitals who would not ordinarily meet the criteria for admission. This was a dangerous practice, involving the use of our psychiatric hospitals as an extension of the criminal justice system, and the Committee strongly opposed it. The Committee then made some specific recommendations and pushed again for a new Law Revision Commission to reconsider the insanity defense and its implications and consequences, and the postverdict procedures.

The April meeting was our annual meeting with the Office of Mental Retardation and Developmental Disabilities (OMRDD); James Otis, Ph.D., Director of the Bureau of Standards and Policy Planning, and Mr. Joseph Kovler, Director of the Bureau of Program Design, were invited guests. They presented a review of the funding structures and programs, including a new, innovative fee-for-services plan, indicating how policies and procedures have always in the past tended to flow from funding programs rather than vice versa. They discussed how they were changing the resultant system in the direction of a staggered system of care, oriented towards their emphasis on community-based services as opposed to institutional care, and one more responsive to the actual needs of the individual patient. The goal is the least amount of supervision and custodial care, and maximum independence and normal living. This can be accomplished through the strong voluntary agency support system they have available, the fee-for-services funding program, and their systems of evaluation and monitoring.

There was some discussion of the role of the private sector, governmental agencies tending to be hesitant in this area. The Committee challenged this, but it must be recognized that this is going to be part of a long-term effort to overcome OMRDD's concerns and win this field, long neglected by our profession, back into good, cooperative relations with us. In accordance with this, we exchanged information and ideas in regard to legislative initiatives in the works, of which they were not aware, concerning patient and third party access to records, changes in the organization of the Mental Health Information Service, and decrease in the anatomy of OMRDD which would now have to report on certain matters to the New York Department of Health (NYSDH). We felt the latter idea was a retrogressive step, hearkening back to the days when the entire Department of Mental Health was part of the NYSDH, and, further, that OMRDD would be reporting to people without background in an awareness of the specific needs of this field. We took stands on these issues which were supportive of and cooperative with OMRDD's points of view, and they were grateful (although they had not initiated any such request).

Other liaison work continues with NYSPA's Legislative Committee and Legislative Representative, as well as, of course, our own Paul Tagliaferro, on many bills before the Legislature. The NYSPA Council has appointed the Chairman of this Committee an ex officio member of its Legislative Committee, and the Chairman also serves on their Psychiatry and Law and Public Psychiatry Committees. The New York County District Branch of the American Psychiatric Association (APA) has appointed a member of their Interprofessional Committee, Dr. Gary Kennedy, to be liaison with our Committee. Several of our members, including the Chairman, continue to meet with members of NYSPA's Legislative Committee, officers of NYSPA, and the New York State Psychological Association's Legislataive Committee, under Doris Miller, Ph.D., and William Wedin, Ph.D. Furthermore, we communicate regularly with each other on matters of common interest, especially legislative matters. Together we continue to pursue with the Department of Education and its Assistant Commissioner for the Professions, Dr. Rita Modrexo-Peterson, some methods of monitoring and regulating the large number of chartered but unsupervised psychotherapeutic training institutes and clinics in the State, many of which are inadequate and some even venal and exploitive. We shall begin contacting members of the Higher and Professional Education Committee of the Board of Regents to alert them to these problems without actually taking a specific stand until we can make recommendations to Council.

Council referred to us the matter of the Board for Professional Conduct's power to subpoena the records of a physician treating another physician under investigation by the Board. While not wishing to restrict the activity of the Board in obtaining pertinent and useful information, the Committee nevertheless felt strongly that these powers would constitute an invasion of the doctor-patient relationship in general, and in particular operate against the accused physician seeking and utilizing help. We supported the confidentiality principle and opposed such subpoena powers. Council approved our recommendation, but it should be noted that a recent decision of the Appellate Division of the N.Y.S. Supreme Court has upheld the right of the Board to subpoena a psychiatrist's record of his treatment of a doctor charged with misconduct. We are on record opposing this and hope for legislation to change it.

This matter leads into a subsequent issue, namely, the McCabe/Padavan Bill and the Governor's Program Bill, both concerning the rights of patients, their parents or guardians, or other third parties to have access to their treatment records, in private practice as well as governmental and nongovernmental institutions. These issues come up regularly in the Legislature, pushed by the American Civil Liberties Union (ACLU) and other civil rights and patient advocacy groups. MSSNY and, to a less firm degree, NYSPA have opposed these trends, but each year the Legislature incorporates our objections and presents the bill anew. This time they are willing to permit psychiatrists, psychologists, alcoholism counsellors, etc., to withhold information felt to be harmful to the patient — this *information withholding* being ultimately subject to judicial review *in camera* if challenged. They and the ACLU would be willing also to include exemptions for personal notes, without guidelines or limitations on such notes. However, nonpsychiatric physicians have neither of these exemptions, as if they did not have anything to do with mental health (e.g., pregnancy or venereal disease in a minor, etc.). Furthermore, there is the question as to whether these matters should be included in a large context of privilege and confidentiality, involving third party payors, the criminal justice system, etc. These matters have been outlined in the APA's Model Law on Confidentiality of Health and Social Service Records. The Committee plans to devote itself to that Model Law, the Governor's Program Bill, and the entire issue at the June meeting, with OMH Deputy Commissioner and Counsel, Mr. Paul Litwak; the NYSPA Psychiatry and Law Committee under Dr. Richard Rosner, Chair; and other invited guests. Furthermore, it will review other states' experiences with such statutes, and hopes to be able to present some recommendations to the Council.

Again we thank Dr. George J. Lawrence and his staff for for their help, and we also thank Dr. Raymond Vickers, our Advisor in the OMH, for his counsel and support. This Committee, incidentally, has a medical student member, Mr. Larry Sandberg, who has attended regularly and states he finds the work of the Committee extremely interesting and highly informative concerning aspects of medicine never taught in medical school.

Respectfully submitted,

Herbert S. Peyser, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

The annual report of the Committee on Mental Health was reviewed. Your reference committee heard a great deal of testimony concerning the insanity defense.

During the hearing, your reference committee heard testimony to the effect that the Committee on Mental Health strongly supports the formation of a new Law Revision Commission to reconsider the insanity defense and its implications and consequences. Keeping in mind the complexity of this issue, your reference committee wishes to draw the attention of the House to this point in considering the disposition of Resolution 82-7, Insanity Defense.

⟹ Your reference committee recommends that the report of the Committee on Mental Health be filed for information.

⟹ . . . *The report of the Committee on Mental Health was* **FILED FOR INFORMATION** . . .

METABOLIC DISEASES

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Metabolic Diseases are as follows:

Joel J. Schnure, M.D., *Chairman*	Broome
Robert S. Bernstein, M.D.	New York
Marshall Clinton, M.D.	Erie
Arthur H. Dube, M.D.	Onondaga
William W. Faloon, M.D.	Monroe
Howard Kolodny, M.D.	Queens
Edward L. Socolow, M.D.	Westchester
* James G. Corasanti	Erie
Sally Kelly, M.D., *Advisor*	Albany

A telephone conference meeting of the Committee on Metabolic Diseases was held on Monday, April 19, 1982.

The Committee obtained a copy of the Medicaid guidelines on payment for devices, testing equipment, and related items for diabetics. The Committee would like to see reimbursement made for the following items also: home glucose monitoring devices, blood sugar reagent strips, and insulin infusion. A motion was made:

> That the MSSNY contact the Office of Health Systems Management and urge that the above items be included among the reimbursable items for patients with diabetes whether they are in or out of the hospital.
>
> The motion was duly seconded and passed unanimously by the Committee. This recommendation was presented to the MSSNY Council at its meeting on May 27, 1982. In view of additional information provided by Sally M. Kelly, M.D., of the State Health Department concerning reimbursement for the cost of various equipment to diabetic patients, the Council referred the matter back to the Committee on Metabolic Diseases for further study.

The Committee discussed a new bill S8335/A.10388, "an act to amend the education law, in relation to the qualifications for school nurses and repealing subdivision one of section nine hundred two of such law to correct a duplication in law." This bill would require that school nurses be qualified in diabetes emergency treatment and in how to test for diabetes according to the latest acceptable medical practice. While the Committee applauds the intent of the bill, it is not sure how such a law would be implemented or enforced. The Committee would like to study this subject further before rendering a final opinion. A copy of the bill was sent to the Committee members for study and submission of comments.

Respectfully submitted,

Joel J. Schnure, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Metabolic Diseases be filed for information.

⟹ . . . *The report of the Committee on Metabolic Diseases was* **FILED FOR INFORMATION** . . .

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* Medical Student

PHYSICAL MEDICINE AND REHABILITATION

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Physical Medicine and Rehabilitation are as follows:

James T. Demopoulos, M.D., *Chairman*	New York
Fortunato Abello, M.D.	Monroe
William H. Georgi, M.D.	Erie
Edward J. Lorenze, M.D.	New York
Milton Lowenthal, M.D.	New York
Boris Paul, M.D.	Albany
Leon M. Rothman, M.D.	Kings
Asa P. Ruskin, M.D.	Kings
Samuel S. Sverdlik, M.D.	New York
* Joseph K. Miller	Erie
William Taylor, M.D., *Advisor*	Albany

One meeting of the Committee on Physical Medicine and Rehabilitation has been held this year on March 19, 1982.

The Committee intends to expand its activities, to meet more often and to establish liaison relationships with other public and private agencies involved with rehabilitation medicine servicing of children and adults. A listing of various relationships was discussed; the Chairman will develop and circulate a more complete listing and appoint various Committee members to serve in liaison capacities. Emphasis was placed on geriatrics and Dr. Edward J. Lorenze accepted responsibility for this area, together with Dr. Leon Rothman (MSSNY Committee on Aging and Nursing Homes and the American Society of Geriatrics).

There was also discussion relevant to strengthening dialogue and cooperation between the Committee and the New York Society of Physical Medicine and Rehabilitation; Dr. Asa Ruskin will serve in this area. The Legislative and Executive Committees of the New York Society of Physical Medicine and Rehabilitation will channel items of concern to MSSNY's Committee on Physical Medicine and Rehabilitation for discussion and transmittal of recommendations to the MSSNY Council. Further, MSSNY's Committee on Physical Medicine and Rehabilitation, through the Chairman, will cooperate with the New York Society of Physical Medicine and Rehabilitation to select and nominate the officers of, and delegates from, the MSSNY Section on Physical Medicine and Rehabilitation.

Dr. Boris Paul, a member of the Committee and Medical Director of the Office of Vocational Rehabilitation (OVR), expressed concerns in several areas, including the lack of a sufficient number of medical consultants, servicing of clients, inadequate fee structures, eligibility criteria, etc. Dr. Paul will serve as the contact individual between the Committee and the OVR, developing and transmitting recommendations to the members and receiving input from all.

There was discussion and clarification of various issues now before the Legislature, including amendments to the Workers' Compensation Law. There were no specific recommendations at that time, other than to reemphasize previously stated positions and recommendations.

It was noted that many insurance policies inadequately cover rehabilitation medicine services. More information will be gathered prior to formulating recommendations.

There have been increasing instances of Medicare disallowances for services provided by psychiatrists acting as the major, attending physician, as well as other issues; the Chairman will meet with Dr. Robert J. O'Connor, Director of the MSSNY Division of Medical Services, to discuss these problems.

Respectfully submitted,

James T. Demopoulos, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Physical Medicine and Rehabilitation be filed for information.

⟹ . . . *The report of the Committee on Physical Medicine and Rehabilitation was* **FILED FOR INFORMATION** . . .

PHYSICIANS' COMMITTEE

To the House of Delegates, Ladies and Gentlemen:

The Chairman of the Physicians' Committee is as follows:

Brian R. Nagy, M.D., *Chairman*	Chemung

Our awareness of the problem of troubled or impaired physicians has increased in recent years, and the MSSNY Physicians' Committee has continued to be active in this field.

We have had 52 referrals to our Committee. A great number have been helped, but, unfortunately, there has been no benefit related to some of the interventions. Of significance, many times the caller was helped through information and suggested course of action. It is hoped that this arm of the service will continue to grow.

One of the biggest problems facing our Committee last year was the lack of manpower. We have recruited new members, bringing the Committee membership to 51, and we are in much better shape than a year ago for reaching most areas of the State.

In September, 1981, a meeting was held at Lake Success. There were 22 of the then 37 members in attendance. We were made aware of the varied backgrounds and experiences of the members. A need for a list of good treatment facilities emerged at that meeting, and this was written and distributed to the membership.

Publicity has also been a major concern of the Committee. An article describing the problem, the Committee, and its workings was published in the *New York State Journal of Medicine* in September of 1981. There was also an information article in the *American Psychiatric Association Area II Bulletin*, which covers psychiatrists in New York State. Information about the Committee has appeared in the *"News of New York"* on several occasions, and individual mailings were sent to the executive secretaries of each of the county medical societies, and the presidents of the auxiliaries of the county medical societies. It was also sent to the president or executive directors of the Hospital Association of New

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* Medical Student

York State (HANYS), the Greater New York Hospital Association (GNYHA) and the New York Association of Private Hospitals (NYAPH). A pamphlet about the Committee will soon be ready for distribution.

It is noted that, in other states with successful programs, smaller size and closer working relationships have been concomitants of success. In connection with this, it is our thought that regionalization of the program will be appropriate. We already have vice-chairmen for the Buffalo and Rochester areas, so that things can be accomplished on a more local level.

Future areas of endeavor will include an ombudsman service to aid physicians with reentry problems, and attempts at increasing awareness of physician impairment at university settings and hoping to gain their expertise to help the Committee. As per the legislation that permitted our existence, a report will be sent to the Department of Health by December 31, 1982, with a complete statistical report and follow-up.

Respectfully submitted,

Brian R. Nagy, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Physicians' Committee be filed for information.

⟹ . . . *The report of the Physicians' Committee was* **FILED FOR INFORMATION** . . .

PREVENTIVE MEDICINE

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Preventive Medicine are as follows:

Russell C. Johnson, M.D., *Chairman*	Orange
John P. Albanese, M.D.	Bronx
Thomas S. Bumbalo, M.D.	Erie
Duncan W. Clark, M.D.	Kings
Yehudi M. Felman, M.D.	Kings
* Randy Kahn	New York
Richard Rothenberg, M.D., *Advisor*	Albany

The Committee continued to be active this year and held a meeting on January 12, 1982. The Committee discussed possible areas of future interest and the direction in which the Committee should go. It was agreed that the Committee should confine itself to those areas traditionally regarded as preventive medicine, in which the Committee has expertise and experience.

The Committee felt that it could play a larger role in publishing pertinent information on preventive medicine to bring physicians up to date in this area. It was suggested that the members could review the Center for Disease Control publications and recommend items for publication in the *New York State Journal of Medicine.* Dr. Rothenberg offered to send material from the New York State Department of Health for publication in the *Journal.* Dr. Felman, as the Committee's expert on sexually transmitted diseases, plans to submit various items for publication on this topic.

The Committee discussed the recent problem of PPNG — Penicillinase Producing Niesseria Gonorrhea. This type of gonorrhea used to be prevalent on the West Coast. However, New York City is now the major U.S. city with this problem. At present only 2 percent of the affected population is resistant to penicillin. Physicians are desperately trying to control the spread of this disease because if the tip point of 5 percent is reached, then the entire treatment pattern must be changed. Presently spectinomycin is used for this small percentage of people. This drug is more expensive than penicillin and it is feared that its efficacy will not be as long-lived. The objective is to control the disease now so that more expensive (and perhaps less effective) drugs will not have to be used on the entire affected population. At the request of the New York State Department of Health, all labs are doing litmus tests on cultures, which give the only true indication of infection with this disease.

Dr. Rothenberg reported that there is a new law which requires county health departments to report six sexually transmitted diseases: syphillis, gonorrhea, genital herpes, trichomoniasis, candidiasis, and non-specific urethritis. The diseases are reported in aggregate numbers. The tests are simple, and the counties are only required to prescribe for the patient, not to actually supply the drugs. Dr. Rothenberg will send a copy of this law to the Committee.

Dr. Rothenberg reported that there has been a reorganization of the public health division of the New York State Department of Health. The new Office of Public Health is headed by Glenn Haughie, M.D. It is divided into three centers: labs, health promotion, and environmental health. The labs center has virtually retained the same functions. The other two centers have been restructured and are in the process of reevaluating their functions.

Dr. Rothenberg used to be the Director of the Bureau of Disease Control. The Bureau is now divided and comes under the Division of Epidemiology and Community Health and the Division of Health Risk Control. There are three sections which are of particular importance to this Committee: heart hypertension institute, diabetes, and health risk reduction.

The Heart Hypertension Institute, mandated by law, came into existence on January 1, 1982. It is funded on a yearly basis and at present has $100,000. It has been suggested that $2.2 million might be obtained for this program in addition to the money already allocated by the federal government. This will be determined at the next legislative session. The HHI is interested in the continuation of existing contracts and further expansion. It encompasses operational research, professional education, and patient education. The purpose of the program is to improve the provision of care and to assure continuity of care. It is felt that the NYSDH must somehow interface with what goes on in the private physician's office to help improve care for the people of New York.

The Diabetes program has been in existence since 1977. The NYSDH is concerned with improving the care of the diabetic patient and in educating both the patient and the physician in regard to the pattern of his handling of the diabetic patient. The NYSDH has four demonstration projects at present to try to determine the best method of handling the diabetic. The NYSDH is also gathering aggregate data figures for analysis. This has included reviewing the hospital records of patients, reviewing the records of specialty physicians, and interviewing some physicians. The assurance of continuity of care is also of utmost importance. There are several education and referral programs that are being tried out.

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* Medical Student

The New York State Department of Health is very much concerned with establishing a closer, more cohesive liaison with the private physician in order to improve the overall quality of care available to the patients in New York State. The NYSDH would like to establish more education programs and maintain a more comprehensive referral system throughout the State for both education and treatment. This is in addition to the care of the private physician and is not intended to be a substitute for that care. There are many health problems in the United States that deserve attention as they are becoming worse. One of the main problems is that of obesity and the fact that more and more women are smoking now. The NYSDH is working to define these problems more clearly and to identify the high-risk groups so that prevention in the form of education may take place earlier. Dr. Rothenberg gave an update of the status of these programs at the Commission meeting in Albany in May, 1982.

On behalf of the entire Committee, the Chairman wishes to thank Dr. George J. Lawrence, Mrs. Elizabeth Daepp, and Miss Cynthia Mustapich for their very able guidance and assistance throughout the year.

Respectfully submitted,
Russell C. Johnson, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Preventive Medicine be filed for information.

⟹ . . . *The report of the Committee on Preventive Medicine was* **FILED FOR INFORMATION** . . .

SCHOOL HEALTH

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on School Health are as follows:

Norman B. Schell, M.D., *Chairman*	Nassau
David N. Broadbent, M.D.	Monroe
Stanley Forray, M.D.	Queens
Robert B. Hayes, M.D.	Livingston
Bentley D. Merrim, M.D.	Kings
John S. Tanner, M.D.	Clinton
Martin C. Ushkow, M.D.	Onondaga
Jacob J. Weiner, M.D.	Nassau
* Frank P. Cammisa, Jr.	New York
Solbritt Murphy, M.D., *Advisor*	Albany

Last fall, a series of provocative letters to the Editor of *THE NEW YORK TIMES* brought limelight to the controversial issues emanating from the newly implemented Public Health Law 2164 on mandatory school immunizations.

The best way to summarize the key facets of these issues is to quote selected passages from these letters in chronologic order so as to provide astute, running commentaries:

October 13

"The new immunization requirements were actually devised to eradicate measles. There were 500,000 reported cases in 1962 (U.S.). In the first half of 1981 there were only 2,624, and only 74 cases have been reported in New York City through September. Counties that strictly enforce immunization requirements for school entrance have a lower incidence of measles than counties that don't, but there is no evidence that measles is enough of a public health problem in New York to warrant school exclusion after kindergarten."

— Jerry C. Jacobs, M.D.
Professor, Clinical Pediatrics
Columbia U., College of P & S

October 19

"The first decision was a federal one that measles could and should be eradicated in the United States. To this end, funding incentives were created and political pressures placed on local and state health departments, beginning in 1977. No one will argue the point that measles should be eradicated, along with a number of other diseases. But there is much scientific skepticism as to whether such an American objective is achievable in a world where the disease remains endemic. To prevent even one infected person from crossing our borders and spreading the virus requires extremely high levels of immunity be maintained, much higher than those that were required to eradicate smallpox.

"Thus the economic, social, and now educational costs of moving from measles control to measles eradication are great. One must seriously question whether such costs are warranted for a disease that, when merely controlled, does not represent a major public health problem.

"The second flawed public policy decision was the State's. It decided to use school exclusion as a device to raise immunization levels. This device, which is often highly successful in middle-class suburbs and small-town America, is essentially a latter-day version of outdated public health police action. It abrogates freedom of choice for the sake of a doubtful cause and is unworkable in a highly heterogeneous urban society, many of whose citizens are poor and without access to affordable immunization services."

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* Medical Student

— Pascal J. Imperato, M.D.
Chairman, Dept. of Prev. Med.
and Community Health
Downstate Medical Center

OCTOBER 29

"This crisis in New York City fortunately has no exact equal in the rest of the State because of the large number of indigent, unimmunized school children involved in this urban setting. The fact is that the school exclusion policy is workable and has worked elsewhere in the State. In most communities, the State and county health departments have usually worked cooperatively and quickly with the schools in organizing massive immunization programs. Moreover, many parents have taken their unimmunized school children to their personal physicians or to clinics for the required inoculations in the face of imminent or actual school exclusion.

"These new and stringent immunization requirements became effective in June, 1980, and have been widely promulgated throughout the State school systems during the past 16 months.

"Surely the New York City Health Department and Board of Education had ample time to plan and organize community resources before the final day of reckoning. Who should bear the guilt of massive school exclusions? The purported lack of funds and staff 'necessary to bring the majority of students into compliance within the school setting' should have been corrected by the health and school administrations long before the crisis developed.

"When a Statewide policy cannot be implemented in a locale, it is too facile and naive to label these State decisions as 'police action' for the 'sake of doubtful cause.' The scientific merits of raising immunization levels of all school children for the purpose of prevention or eradication of these major diseases cannot be challenged on the basis of New York City's social and economic shortcomings."

— Norman B. Schell, M.D., M.P.H.
Chairman, School Health Committee
MSSNY

NOVEMBER 30

"All states now require immunization of school children; 38 use exclusion from school to enforce the immunization requirement. The dramatic nationwide decline in diphtheria, polio, measles, mumps, and rubella attests to the value of this approach.

"School exclusion is not a trivial technique. Fortunately, experience indicates that, after a community recognizes that the law will be enforced, compliance for most becomes a matter of course. As of November 13, 1981, only 9,600 (1 percent) of the city's public school pupils were still excluded. In comparison, 150,000 (10 percent) are absent on an average day, more than 60,000 without excuse. Since the city has removed fiscal and logistical barriers to vaccinating all, we suspect the 9,600 have problems far greater than immunization. We urge immediate evaluation of the 'excluded' so that a policy can be developed on their behalf.

"Bureaucratic infighting between an embattled Board of Education and a chronically impoverished Department of Health adds frustration and anger to a task that would have been difficult even if resources were not scarce.

"The New York City program achieved its goal. More than one million pupils are immunized. In coming years it should be relatively easy to focus attention on those just starting school. If public commitment remains firm, full protection of all our children against vaccine-preventable diseases is an achievable city and national goal."

— Louis Z. Cooper, M.D.
— Anne A. Gershon, M.D.
— James G. Lione, M.D.
American Academy of Pediatrics,
District II, New York

Needless to say, the substance of these letters provided the School Health Committee with fuel for a long and heated discussion at its November meeting. The final, shared sentiment of the Committee was that the law is sound, but some of its over-rigid regulations could be changed. It was agreed that the Committee, as well as other practicing physicians throughout the State, should be asked for input on future State regulations relating to school health legislation and directives.

At its meeting on September 10, the MSSNY Council approved the Sports Candidates' Questionnaire which the Committee had published in the September issue of the *New York State Journal of Medicine*. A copy of the Questionnaire was subsequently forwarded to Mr. Gordon Ambach, Commissioner of Education. Mr. Ambach later replied that his staff would review it and then inform the State Medical Society of their decision whether to adopt it Statewide.

Another lively issue with which the Committee has been grappling is that of administration of medications in schools. One view is that students be allowed to administer their own medications as prescribed by their physicians — especially those students who are chronically ill.

If only the school nurse were permitted to administer the prescribed drugs, the sense of maturity and responsibility being nurtured in these students would be undermined. However, the Committee as a whole believes that the existing regulations are meant to provide a service for the student (and the parents), and these policies facilitate rather than prohibit the administration of medicine in schools. There is always the possibility of some student accidentally or purposely taking another student's medication (such as tranquilizers or stimulants). In addition, each school district can establish its own policy regarding the use of teachers for administration of drugs.

The new advisor to the Committee, Dr. Solbritt Murphy, briefed the Committee on the new State-funded school health projects:

The new State-funded school health projects are aimed at the three cities under home rule: Buffalo, Rochester, and

New York City. She reported that $2 million have been appropriated for the first year of the projects. They are to provide health services for the schools in under-served areas of these cities. The programs encourage hospitals and clinics, as well as schools, to take responsibility for the students' health care, and they also encourage the use of nurse practitioners. Under Article 28, the provider hires staff, and the State Health Department signs the contract. The first funding cycle will probably have two projects in New York City and one each in Buffalo and Rochester. After a review, the second funding cycle will begin. The projects serve children from ages 5 to 15, but they are not yet in the high schools. They are funded on a yearly basis and mainly are in the sections of these cities where there are few or no private practitioners.

The School Health Committee wishes to reiterate its annual appreciation of Dr. George J. Lawrence and his able staff for their invaluable support throughout the year.

Respectfully submitted,

Norman B. Schell, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on School Health be filed for information.

⟹ . . . *The report of the Committee on School Health was* **FILED FOR INFORMATION** . . .

SCIENTIFIC PROGRAM

To the House of Delegates, Ladies and Gentlemen:

The members of the Scientific Program Committee are as follows:

Stephen Nordlicht, M.D., *Chairman*	New York
Thomas S. Bumbalo, M.D., *Assoc. Chairman*	Erie
John S. Davis, M.D., *Assoc. Chairman*	Otsego
Joseph J. Kaufman, M.D., *Assoc. Chairman*	Wayne
Martin Lipkin, M.D., *Assoc. Chairman*	New York
A. W. Martin Marino, Jr., M.D., *Assoc. Chairman*	Kings
John F. Spring, M.D., *Assoc. Chairman*	Broome
Maxwell Spring, M.D., *Assoc. Chairman*	Bronx

The Scientific Program Committee was surveyed in September, 1981, by the Accreditation Council for Continuing Medical Education for CME reaccreditation. As a result of this survey, MSSNY, through the Committee, continues to be accredited for CME for another four years. It can, therefore, continue to present approved Category 1 programs for its members and all physicians who wish to attend our meetings.

The 1982 CME Assembly was held June 25, 26, and 27 at the Rye Town Hilton Hotel in Port Chester, New York. The registration figures below indicate that a location close to New York City results in more physicians attending the Assembly.

Attendance 1982 CME Assembly
June 25-27 Rye Town Hilton, Port Chester

Physicians	1,172
* Allied Profession	128
Guests	95
Total	1,395

* Includes: Dentists, Ph.D.s, medical students, nurses, medical technicians, etc.

Comparative Figures:

	Rye Town Hilton 1980	Niagara Falls 1981	Rye Town Hilton 1982
Physicians	1,334	708	1,172
Allied Profession	102	94	128
Guests	91	143	95
Total	1,527	946	1,395

Next year's CME Assembly will again be held at the Rye Town Hilton Hotel on May 13, 14, and 15, 1983. Beginning in 1984, we shall return the Assembly to a New York City locale.

The Chairman wishes to thank the Associate Chairmen of the Committee and also all the Section and Session Chairmen for their tremendous contributions in developing the program for this year's CME Assembly.

Respectfully submitted,

Stephen Nordlicht, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Scientific Program Committee be filed for information.

⟹ . . . *The report of the Scientific Program Committee was* **FILED FOR INFORMATION. . .**

AD HOC COMMITTEE ON "DO NOT RESUSCITATE" ORDERS

To the House of Delegates, Ladies and Gentlemen:

The members of the Ad Hoc Committee on "Do Not Resuscitate" Orders are as follows:

Allison B. Landolt, M.D., *Chairman*	Westchester
Abraham Halpern, M.D.	Westchester
Lawrence S. Kryle, M.D.	Nassau
Sheldon H. Putterman, M.D.	Queens
Charles E. Rogers, M.D.	Nassau
Joseph G. Zimring, M.D.	Nassau

This Committee was appointed by the President at the request of the Council to evaluate and implement a recommendation made by the Committee on Ethics regarding "Do Not Resuscitate" orders. We were asked to develop guidelines and report back to the Council at its September meeting.

The Committee met on July 1, 1982, and reviewed much material on the topic of "DNR" orders as developed in other parts of the country. The Committee also discussed the implementation of "DNR" orders and possible legal implications resulting from such procedures. The following recommendation was moved, seconded, and passed unanimously by the Committee:

> That the Legislative Committee prepare model legislation to provide immunity for physicians and hospitals when implementing "DNR" orders.

The Ad Hoc Committee reported its recommendations to the Council and the entire matter was discussed, approved and referred to the House of Delegates for consideration at the Annual Meeting. Having completed its assigned task, the President discharged the Committee with appreciation. Appended are the guidelines as recommended by the Ad Hoc Committee on "DNR" Orders and approved by the Council at its meeting on September 9, 1982.

Respectfully submitted,

Allison B. Landolt, M.D., *Chairman*

APPENDIX "A"

GUIDELINES FOR HOSPITALS AND PHYSICIANS ON "DO NOT RESUSCITATE"

The following are intended *only* to be guidelines for physicians and hospitals. Hospital medical staffs and governing bodies are encouraged to develop policies consistent with their respective by-laws and rules and regulations.

DEFINITION

DNR (Do Not Resuscitate) means that, in the event of a cardiac or respiratory arrest, cardiopulmonary resuscitative measures will not be initiated or carried out.

BACKGROUND

1. An appropriate knowledge of the serious nature of the patient's medical condition is necessary.
2. The attending physician should determine the appropriateness of a DNR order for any given patient.
3. DNR orders are compatible with maximal therapeutic care. A patient may receive vigorous support in all other therapeutic modalities and yet a DNR order may be justified.
4. When a patient is capable of making his own judgments, the DNR decision should be reached consensually by the patient and physician. When the patient is not capable of making his own decision, the decision should be reached after consultation between the appropriate family member(s) and the physician. If a patient disagrees, or, in the case of a patient incapable of making an appropriate decision, the family member(s) disagree, a DNR order should not be written.

IMPLEMENTATION

1. Once the DNR decision has been made, this directive shall be written as a formal order by the attending physician. A verbal or telephone order for DNR cannot be justified as a sound medical or legal practice.
2. It is the responsibility of the attending physician to insure that this order and its meaning are discussed with appropriate members of the hospital staff.
3. The facts and considerations relevant to this decision shall be recorded by the attending physician in the progress notes.
4. The DNR order shall be subject to review at any time by all concerned parties on a regular basis and may be rescinded at any time.

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Ad Hoc Committee on "Do Not Resuscitate Orders" be filed for information.

⟹ *. . . The report of the Ad Hoc Committee on "Do Not Resuscitate Orders" was* **FILED FOR INFORMATION** . . .

Resolution 82-1, The Independent Practice of Medicine by "Nurse Practitioners"

Introduced by Medical Society of the County of Kings

Whereas, The education and training of nurses significantly differ both qualitatively and quantitatively from the education and training of physicians; and

Whereas, There is an attempt to obfuscate the training, education, and practice of medicine with the training, education, and practice of nursing; therefore be it

Resolved, That the Medical Society of the State of New York, in the public interest, oppose the independent practice of medicine by any individuals who have not completed the presently prescribed education and examination for licensure for the practice of medicine; and be it further

Resolved, That without exception the independent practice of medicine remain under the authority and control of the New York State Board for Medicine; and be it further

Resolved, That this resolution be disseminated to county medical societies in the State of New York.

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

The Committee amended Resolution 82-1 to read as follows:

Resolved, That the Medical Society of the State of New York, in the public interest, oppose the independent practice of medicine by any individuals who have not completed the presently prescribed education and the examination for licensure for the practice of medicine; and be it further

Resolved, That without exception the independent practice of medicine remain under the authority and control of the New York State Board for Medicine; and be it further

Resolved, That this resolution be disseminated to county medical societies in the State of New York; and be it further

Resolved, That the New York Delegation to the AMA be instructed to introduce this resolution at the Interim Meeting of the 1982 AMA House of Delegates.

The House amended Resolution 82-1 to read as follows:

Resolved, That the Medical Society of the State of New York, in the public interest, oppose the independent practice of medicine by any individuals who have not completed the presently prescribed education and the examination for licensure for the practice of medicine; and be it further

Resolved, That without exception the independent practice of medicine remain under the authority and control of the Board of Regents and assisted by the New York State Board for Medicine; and be it further

Resolved, That this resolution be disseminated to county medical societies in the State of New York; and be it further

Resolved, That the New York Delegation to the AMA be instructed to introduce a resolution embodying these intents at the Interim Meeting of the 1982 AMA House of Delegates.

⟹ . . .*The House, after discussion, voted to* **ADOPT** *Resolution 82-1 as* **AMENDED** *and* **AMENDED**. . .

Resolution 82-5, Legalized Abortion

Introduced by Ontario County Medical Society, Inc.

Whereas, Abortion has enjoyed legal status for more than a decade, resulting in benefit for many thousands of women annually; and

Whereas, The official position paper on abortion of the Medical Society of the State of New York fails to address this issue; therefore be it

Resolved, That the Medical Society of the State of New York endorse the concept and the fact of legalized abortion; and be it further

Resolved, That the Medical Society of the State of New York affirm its opposition to any legislative effort to abridge the right of women to safe, legal abortion.

PAST HOUSE ACTION: Resolutions 71-55, 71-80, 72-36, and 81-15

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

The committee amended Resolution 82-5 to read as follows:

Resolved, That the Medical Society of the State of New York recognize the fact of legalized abortion; and be it further

Resolved, That the Medical Society of the State of New York support the right of women to safe, legal abortion.

⟹ Your reference committee recommends that Resolution 82-5 be adopted as amended.

The House amended Resolution 82-5 to read as follows:

Resolved, That the Medical Society of the State of New York recognize the fact of legalized abortion; and be it further

Resolved, That the Medical Society of the State of New York support the right of all women to safe and legal abortion.

⟹ . . . *The House, after considerable discussion, voted to* **ADOPT** *Resolution 82-5 as* **AMENDED** *and* **AMENDED** (221 Voting: 111 required to pass; 160, Yes; 61, No)

The following statement represents the minority opinion regarding the amended Resolution 82-5, as adopted by the House of Delegates.

It is recognized that abortion on demand is the law of the land. The responsibility of physicians in regard to the safe conduct of a legal abortion is recognized and was addressed in the Position Papers of the Society in 1970 and reaffirmed in 1981 by the House of Delegates.

Resolution 82-5, however, introduces the moral, ethical, religious, and philosophical aspects of the abortion issue which we do not consider to be within the purview of the House of Delegates.

We deplore the action taken today by the House sinces it impinges on the moral conscience of many members of the Medical Society. It should not be construed as representative of the opinion of the entire membership or the medical community as a whole.

The following delegates have endorsed this minority report by their negative vote on Resolution 82-5:

Harry F. Abe, M.D., Nassau
John P. Albanese, M.D., Bronx
Victorino Anllo, M.D., Erie
Leonard A. Argentine, M.D., Oneida

Charles A. Bauda, M.D., Queens
Frank J. Bolgan, M.D., Erie
Joseph R. Brennan, M.D., Kings

Duane M. Cady, M.D., Onondaga
Frank R. Collier, M.D., Suffolk
James H. Cosgriff, Jr., M.D., Erie

James G. Dahlie, M.D., Chautauqua
Paul M. DeLuca, M.D., Broome
Armand J. D'Errico, M.D., Fulton
William A. Dolan, M.D., Monroe
Daniel L. Dombroski, M.D., Onondaga
Thomas J. Doyle, M.D., Queens

Anthony J. Federico, M.D., Erie
James M. Flanagan, M.D., Wayne
Richard J. Freeman, M.D., Cayuga

Nicholas J. Gabriel, M.D., Cortland
Robert George, M.D., Oneida
Edmond J. Gicewicz, M.D., Erie
Louis W. Giordano, M.D., Broome

Alfred A. Hartmann, Sr., M.D., Franklin
Richard A. Konys, M.D., Onondaga

Dattatraya G. Lanjewar, M.D., Bronx
Michael N. Lavacca, M.D., Bronx
Charles Laverdi, M.D., Bronx
Paul C. Lehmuller, M.D., Nassau
Nicholas T. Leone, M.D., Kings

Albert A. Mazzeo, M.D., Orange
Francis J. McMahon, M.D., Dutchess
Felix A. Monaco, M.D., Nassau

Daniel F. O'Keeffe, M.D., Warren
John A. Ostuni, M.D., Nassau

Victor A. Panaro, M.D., Erie

George W. Pelebecky, M.D., Bronx
Thomas D. Pemrick, M.D., Rensselaer
Arthur Q. Penta, M.D., Schenectady
Frank J. Piper, M.D., Onondaga
Bernard J. Pisani, M.D., New York
Joseph A. Prezio, M.D., Erie
Thomas D. Rizzo, M.D., Westchester
Charles R. Salamone, M.D., Monroe
Joseph F. Shanaphy, M.D., Richmond
Michael Sierp, M.D., Westchester
Edward C. Sinnott, M.D., Nassau
John F. Spring, M.D., Broome

Members of the House noted that the Guidelines were originally adopted in 1970 and needed up-dating; e.g. 80% of abortions in this State are being done in physicians' offices, and this is a pattern throughout the United States. It was felt that experts in the field of OB/GYN should evaluate these guidelines.

⇒ *. . . The House voted to* **REFER** *the "White Paper" on Abortion, which had been approved by the Society in 1970 and reaffirmed by the 1981 House of Delegates, to the Council . . .*

Resolution 82-6, Direct Advertising of Prescription Drugs to Lay Persons

Introduced by Broome County Medical Society

Whereas, Some manufacturers of prescription drugs have embarked on an advertising campaign for prescription drugs directly to patients; and

Whereas, Such direct advertising in its content could be reasonably expected to cause concern on the part of the targeted population; and

Whereas, Lay persons generally are not sufficiently sophisticated to make decisions regarding the administration of prescription drugs; and

Whereas, The advertisements invite the patient to encourage the physician to administer the drug; and

Whereas, This practice inverts the usual patient/physician relationship and introduces a potential element of antagonism in the physician/patient encounter; and

Whereas, Recognized experts in the field of public health disagree over the cost benefit ratio for mass administration of certain prophylactic drugs; and

Whereas, The profit motive for the drug company would seem to clearly influence the vigor and tone of the advertising campaign; therefore be it

Resolved, That the Medical Society of the State of New York investigate the scope and extent of direct advertising of prescription drugs to lay persons and communicate such information to its membership; and be it further

Resolved, That the Medical Society of the State of New York officially take an opposed position to such direct advertisement and communicate it to all members of the Medical Society of the State of New York; and be it further

Resolved, That such information and such official position be communicated to all major prescription drug manufacturers; and be it further

Resolved, That this resolution as adopted by the House of Delegates at this annual meeting of the Medical Society of the State of New York be submitted to the American Medical Association by the New York Delegation for consideration by the AMA House of Delegates.

◆

⇒ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

The introducer of Resolution 82-6 suggested several amendments to the original resolution. The Reference Committee felt that the proposed amendments are viable and recommends that the resolution be amended to read as follows:

Whereas, Some manufacturers of prescription drugs have embarked on an advertising campaign for prescription drugs directly to patients; and

Whereas, Such direct advertising in its content could be reasonably expected to cause concern on the part of the targeted population; and

Whereas, The patient may not be sufficiently sophisticated to make decisions regarding the administration of prescription drugs; and

Whereas, The advertisements encourage the patient to encourage the physician to administer the drug; and

Whereas, This practice inverts the usual patient/physician relationship and introduces a potential element of antagonism in the physician/patient encounter; and

Whereas, Recognized experts in the field of public health disagree over the cost benefit ratio for mass administration of certain prophylactic drugs; therefore be it

Resolved, That the Medical Society of the State of New York be aware of direct advertising of prescription drugs to patients and communicate such information to its membership; and be it further

Resolved, That the Medical Society of the State of New York officially take a position of opposition to such direct advertisement and communicate it to all members of the Medical Society of the State of New York; and be it further

Resolved, That such information and such official position be communicated to all major prescription drug manufacturers; and be it further

Resolved, That this resolution, if adopted by the House of Delegates at this meeting of the Medical Society of the State of New York, be submitted to the American Medical Association by the New York Delegation for consideration by the AMA House of Delegates.

⇒ Your reference committee recommends that Resolution 82-6 be adopted as amended.

⇒ *. . . The House, after discussion, voted to* **REFER** *Resolution 82-6 and the amended resolution to the Council for further study . . .*

Resolution 82-7, Insanity Defense

Introduced by Medical Society of the County of Westchester, Inc.

Whereas, Recent judicial procedures, trials, and forensic activities relating to the insanity defense have caused considerable bemusement, misconception, and misinterpretation of legal services and proceedings; and

Whereas, The insanity defense has made a mockery of jurisprudence and psychiatry; therefore be it

Resolved, That the Medical Society of the State of New York seek to accomplish a legislative change addressing itself to the abolition of the insanity defense, in favor of a finding of guilty but mentally ill if so determined; and be it further

Resolved, That this resolution be submitted to the AMA House of Delegates Interim Meeting for action and recommendations.

■

⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

According to testimony presented at the hearing, your reference committee feels that psychiatrists themselves appear to be split on the issue of the insanity defense and recommends that Resolution 82-7 be referred to the Council for referral to the proper committee.

⟹ Your reference committee recommends that Resolution 82-7 be referred to the Council.

⟹ . . . *The House, after discussion, voted to* **REFER** *Resolution 82-7 to the Council . . .*

Resolution 82-8, Statute Requiring Reporting of Impaired Physicians

Introduced by Medical Society of the County of Westchester, Inc.

Whereas, The statute requiring the reporting of impaired physicians has apparently failed to detect any significant number of doctors in difficulty; and

Whereas, The State of Maine has repealed its "snitch law" passed in 1971 because it discouraged impaired doctors from seeking treatment and failed to detect the "sick physician"; and

Whereas, Such laws further erode the privacy of the individual and encourage the State to increasingly ignore the sanctity of each citizen's right to life, liberty, and property; therefore be it

Resolved, That the Medical Society of the State of New York go on record to oppose any statute requiring a physician to report his colleague for impaired behavior; and be it further

Resolved, That the Medical Society of the State of New York expeditiously pursue all efforts to rescind statutes relating to reporting of sick physicians to any governmental body; and be it further

Resolved, That the Medical Society of the State of New York continue to vigorously seek out impaired physicians and encourage them to obtain treatment and suspend their practice of medicine until they are recovered.

■

⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

The Committee amended the first resolve of Resolution 82-8 to read as follows:

Resolved, That the Medical Society of the State of New York go on record as opposing any statute requiring a physician to report his colleague for impaired behavior.

⟹ Your reference committee recommends that Resolution 82-8 be adopted as amended.

⟹ . . . *The House, after discussion, voted to* **REFER** *Resolution 82-8 and the amended resolution to the Council . . .*

Resolution 82-19, Demand for Enactment of Safety Belt Usage Law

Introduced by Section on Orthopedic Surgery and the Seventh District Branch

Whereas, The House of Delegates of the Medical Society of the State of New York supported in principle safety belt usage legislation in 1973 and 1974; and

Whereas, Safety belt usage in the United States and in New York State is at the lowest level in 9 years — 9-14% among injured motorists; and

Whereas, The federal government has failed to require passive restraints in new automobiles sold in the United States; and

Whereas, Small cars are now driven by a majority of motorists and the crash protection provided is far less than the protection provided by older, larger cars; and

Whereas, New York State is a community of people governed by laws enacted for the common good some of which necessarily restrict personal privileges and actions; and

Whereas, New York State enacted a Child Restraint Law in 1981; and

Whereas, New York State has required by law that motorcyclists wear crash helmets since 1966; and

Whereas, All motorists should receive the same protection under the law afforded children and motorcyclists; and

Whereas, Safety belts are the single most effective means of protecting the motorist against serious and fatal injuries; and

Whereas, The Governor's Alcohol and Highway Safety Task Force recommended enactment of a safety belt usage law for the protection of the motorist against the drunk driver; and

Whereas, Virtually all other developed nations in the world require by law that motorists use safety belts because safety belt usage laws have been the only effective means of obtaining usage by the motoring public and have reduced the severity, frequency, and costs of traffic accident injuries; therefore be it

Resolved, That the Medical Society of the State of New York, through its Committee on State Legislation, county medical societies, and members, inform the members of the New York State Legislature of the very low safety belt usage rates in New York State, and the increase in the usage of small cars which provide far less protection than the older, larger cars they are replacing, and demand enactment of a safety belt usage law for the protection of New York State motorists.

PAST HOUSE ACTION: Resolutions 73-35 and 74-65

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⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ Your reference committee recommends that Resolution 82-19 be adopted.

⟹ . . . *The House, after discussion, voted to* **ADOPT** *Resolution 82-19* . . .

The reference committee reviewed the minutes of the Council of MSSNY of October 7, 1982, and commends the Council for the action it took to support the establishment of a structured coalition to lead and direct the program to increase safety belt usage in New York State. The coalition will be named the New York Coalition for Safety Belt Usage.

⟹ Your reference committee recommends that the MSSNY proceed forthwith to supply the Coalition with office space and other ongoing support.

⟹ . . . *After discussion, the House voted to* **REFER** *the recommendation of the reference committee to the Council* . . .

Resolution 82-20, Control of the Drunk Driver by Increasing the Driver's Fear of Arrest, Prosecution, Conviction, and Punishment in Place of Harsher Penalties

Introduced by Seventh District Branch

Whereas, Public awareness of the criminality of drunk driving has led to harsher penalties for convicted drunk drivers in some states of the United States and abroad; and

Whereas, Harsher penalties have not been effective in decreasing drunk driving because the penalties are much less frequently applied, arrest rates and conviction rates decrease and plea bargaining increases; and

Whereas, Strict and more frequent application of the law occurs when the penalties are reasonable because the police are more likely to apprehend a driver and the judiciary is more successful in prosecuting the offender; and

Whereas, The fear of arrest, prosecution, conviction, and punishment is the most effective means of controlling the drunk driver; and

Whereas, The scientific and legal bases of the above statements recently have been published in an easily readable book by H. L. Ross, "Deterring the Drinking Driver," Lexington Books, D. C. Heath and Co., 125 Spring Street, Lexington, MA 02173; and

Whereas, New York State currently has laws, including the STOP-DWI Law of 1981, which imposes reasonable penalties for drunk driving; therefore be it

Resolved, That the Medical Society of the State of New York support both the enforcement of current law, particularly the 1981 STOP-DWI Law; and legislative and administrative actions by state and local governments which will increase the fear of drunk drivers that they will be arrested, prosecuted, convicted, and punished; and that MSSNY not support harsher penalties for drunk driving.

PAST HOUSE ACTION: Resolutions 81-37 and 81-38

◆

⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

Your reference committee has considered Resolution 82-20 and wishes to present the following substitute resolution:

Resolved, That the Medical Society of the State of New York reaffirm its support of the enforcement of current law, particularly the 1981 STOP-DWI Law; and be it further

Resolved, That the MSSNY support legislative and administrative actions by state and local governments which will increase the fear on the part of drunk drivers that they will be arrested, prosecuted, convicted, and punished; and be it further

Resolved, That MSSNY not support harsher penalties for drunk driving until such time as evaluation of the 1981 STOP-DWI Law can be accomplished.

⟹ Your reference committee recommends adoption of the substitute resolution for Resolution 82-20.

The House amended the substitute resolution to read as follows:

Resolved, That the Medical Society of the State of New York reaffirm its support of the enforcement of current law, particularly the 1981 STOP-DWI Law; and be it further

Resolved, That the MSSNY support legislative and administrative actions by state and local governments which will increase the realization on the part of drunk drivers that they may be arrested, prosecuted, convicted, and punished.

⟹ . . . *The House, after considerable discussion, voted to* **ADOPT** *the substitute resolution for Resolution 82-20 as* **AMENDED** . . .

Resolution 82-24, Accreditation by Liaison Committee on Medical Education

Introduced by Medical Society of the County of Niagara, Inc.

Whereas, Standards of accreditation, crediting, and licensure are established for the purpose of protecting the public; and

Whereas, The Liaison Committee for Medical Education is recognized in this country as the authority to set and enforce minimum standards which must be met by medical schools; and

Whereas, The medical school is a most important part of entry to the pathway of licensure because of the screening of applicants, the development of basic skills and knowledge, and the evolution of performance which occurs in that environment; and

Whereas, The so-called Fifth Pathway Schools (notably Caribbean and Mexican) are not subject to the standards established by the aforesaid Liaison Committee; and

Whereas, The third and fourth years of training — so important in medical education — are not served in Fifth Pathway institutions; and

Whereas, The students in programs not meeting LCME standards are not examined on licensure to the same degree of excellence as in accredited schools; and

Whereas, This results in the licensing of practitioners from Fifth Pathway schools with the same endorsement as any graduate of the accredited schools; therefore be it

Resolved, That the Medical Society of the State of New York recommend that the Board of Regents require graduation from a program of medical education that is accredited by the Liaison Committee on Medical Education as a prerequisite for an unrestricted license to practice medicine in the State of New York.

⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

Discussion in the reference committee revealed that the acceptance of students from off-shore medical schools for 3rd- and 4th-year clinical clerkships and the accreditation of these medical schools is a very complex issue. It noted that the development of mechanisms to monitor this situation is actually in progress at the present time by the Committee on Medical School Relationships. This is a major problem in medicine in New York State that needs to be faced now, and significant resources of the MSSNY should be committed to the study of this problem. This matter requires further study, and your reference committee recommends that this resolution be referred to the Council for referral to the proper committee.

⟹ Your reference committee recommends that Resolution 82-24 be referred to the Council.

⟹ . . . *The House voted to* **REFER** Resolution 82-24 to the Council . . .

Resolution 82-50, Nursing Home Visits Based on Need

Introduced by Section on Internal Medicine

Whereas, Some state or local Medicare regulations restrict physician-visits to patients (in the hospital, nursing home, or at home) to an extent greater than Federal law requires; and

Whereas, This is detrimental to good patient care; therefore be it

Resolved, That the Medical Society of the State of New York oppose mandatory monthly visits by physicians to patients in long-term care facilities and work for such legislative and regulatory change as appropriate to affect a policy that physician visits to patients in long-term facilities be based solely on medical necessity.

■

⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

Your reference committee noted that the Council of the MSSNY has already approved a recommendation of the Committee on Aging and Nursing Homes to implement a plus or minus 5 day leeway to the 30-day visit requirement, which the reference committee feels to be adequate. This position has been presented to the Commissioner of Health of New York State.

⟹ Your reference committee recommends that Resolution 82-50 not be adopted.

⟹ . . . *The House, after discussion, voted to* **ADOPT** *Resolution 82-50* . . .

Resolution 82-75, Legal Drinking Age

Introduced by Mark Levitan, Theodore Mazer, and Robin Tapper, Medical Student Delegates

Whereas, Recent studies by the New York State Department of Motor Vehicles have shown that licensed drivers under age 21 comprise only approximately 7 percent of licensed drivers in New York State, yet account for over 20 percent of reported accidents related to alcohol use; and

Whereas, One could reasonably expect similar findings in other states; and

Whereas, Alcohol use has been reported to increase the risk of crash involvement among teenagers to a greater degree than among any age group from twenty to sixty-nine; and

Whereas, There would be good reason to expect a significant decrease in both the number of automobile accidents and the number of motor vehicle fatalities in any state in which the legal drinking age were to be raised to 21; and

Whereas, Young people will often cross state lines in order to enter states where they may legally drink, and then return home while intoxicated; and

Whereas, Teenage alcohol use and abuse as related to other than motor vehicle accidents has become a major social problem; therefore be it

Resolved, That the Medical Society of the State of New York seek and support legislation to raise the legal drinking age in New York State to 21; and be it further

Resolved, That the MSSNY submit a resolution to the House of Delegates of the American Medical Association, requesting that it encourage each state medical society to seek similar legislation if the legal drinking age in its state is under 21.

■

⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ *Your reference committee recommends that Resolution 82-75 be adopted.*

⟹ *. . . The House voted to* **ADOPT** *Resolution 82-75 . . .*

Resolution 82-40, CME Reporting Form

Introduced by Leo A. Green, M.D., as an Individual

Whereas, Physicians in the State of New York frequently attend out-of-*State meetings; and*

Whereas, Continuing medical education credits should be made easily reportable; and

Whereas, A fixed number of category one credits are required for continued membership in the Medical Society of the State of New York; and

Whereas, There is a tendency for legislation to be introduced to require evidence of continued medical education; and

Whereas, The present system of reporting continuing medical education falls short because of the fact that reporting blanks are not readily available to the practicing physician; therefore be it

Resolved, That the Medical Society of the State of New York recommend that each year each physician receive a package of continuing medical education reporting blanks from his/her county medical society with his/her dues notice; and be it further

Resolved, That at such time as the physician pays his dues he/she should also send back to the county medical society completed continuing medical education forms that have been accumulated; and be it further

Resolved, That these continuing medical education forms provide for all categories of continuing medical education credit.

■

⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ *Your reference committee recommends that Resolution 82-40 not be adopted.*

The House considered the following substitute resolution:

Resolved, That a form for reporting continuing medical education be bound into each copy of the New York State Journal of Medicine; and be it further

Resolved, That these continuing medical education forms provide for all categories of continuing medical education credit.

⟹ *. . . After discussion, the House voted to* **REFER** *the substitute resolution for Resolution 82-40 to the Council . . .*

Resolution 82-42, Malpractice Prevention Course

Introduced by Medical Society of the County of Queens

Whereas, Participation in continuing medical education is a requirement for membership in the Medical Society of the State of New York; and

Whereas, The number of incidents of malpractice cases continues to rise; and

Whereas, A large number of these cases are preventable through education; therefore be it

Resolved, That mandatory attendance at an accredited course in malpractice prevention be a part of the yearly continuing medical education requirement of the Medical Society of the State of New York.

■

⟹ *Report of the Reference Committee on Public Health and Education:* The following report was presented by Frederick J. Michel, M.D., *Chairman.*

⟹ *Your reference committee recommends that Resolution 82-42 not be adopted.*

⟹ *. . . The House, after discussion, voted to* **NOT ADOPT** *Resolution 82-42 . . .*

MEDICAL SERVICES

COST CONTAINMENT

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Cost Containment are as follows:

Leonard S. Weiss, M.D., *Chairman*	Orange
Samuel M. Gelfand, M.D., *Vice-Chairman*	Nassau
Robert H. Carrier, M.D.	Monroe
Vernal G. Cave, M.D.	Kings
Jason K. Moyer, M.D.	Broome
John A. Ramsdell, M.D.	Westchester
*Scott D. Hayworth	New York

The Committee held two formal meetings since the last annual report to the House of Delegates. The following matters were considered:

Cost Containment Overview

The Chairman pointed out the public's awareness of the high cost of medicine, stressing that physicians must demonstrate by involvement their awareness of the need to effectively contain costs while maintaining quality medical care. Further, while physicians significantly influence the cost of medical care by recommending hospitalization for their patients, prescribing the necessary medications and diagnostic tests, etc., it is imperative to emphasize that their efforts to contain costs are seriously hampered by the malpractice crisis which necessitates the costly practice of defensive medicine. Consumers must, therefore, be made aware of this circumstance which results in the cost of malpractice insurance being passed on to them.

The Chairman also observed that while the Committee was initially charged with matters concerning hospital costs, it is now involved with cost containment on a broader basis.

Establishing of Task Force

The Chairman proposed the establishment of a "Task Force" comprised of committee members to conduct liaison with pertinent key individuals concerned with health care costs, e.g., representatives of Blue Cross/Blue Shield, Commercial Carriers, Hospital Association of New York State (HANYS), New York State Department of Health, Industry, Labor (unions), Consumers, etc.

This group would then develop a brochure[†] summarizing the cost containment views of their organizations for distribution to physicians, legislators, consumers, etc.

The Committee proposed that these organizations be invited by letter to submit a brief summary of their cost containment views for incorporation in the proposed brochure (further clarification and guidance concerning this project would be provided via follow-up contacts with the organizations by specifically assigned committee members).

The Chairman stressed the need to develop and disseminate an educational brochure at this time on this important issue. Besides presenting the aforementioned views, the brochure would:

- exhibit organized medicine's leadership in the cost containment movement and alleviate its alleged role as reactor to this crucial health care issue;
- demonstrate a unified approach to the problem of rising health care costs and endeavor to motivate the necessary action of all concerned to relieve this crisis;
- provide educational and motivational material to other groups and/or individuals expressing interest in containing health care costs.

Participation in MSSNY Scientific Meeting, June 25–27, 1982

The Chairman affirmed the need for keeping cost containment on the agenda for this meeting since it is an important issue relating to scientific activities. It was identified that policy only allows individuals representing sections of the State Society to present programs at the CME meeting. It was, therefore, recommended that a separate meeting on Cost Containment be considered.

The Chairman expresses his appreciation to the members of the Committee for the time and effort they have devoted to the work of the Committee. He also wishes to thank Robert J. O'Connor, M.D., Director of the Division of Medical Services, Mr. Mario V. Menghini, Assistant Director, and Ms. Joan Reilly, Secretary, for their efforts and diligence.

Respectfully submitted,

Leonard S. Weiss, M.D., *Chairman*

■

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Cost Containment be filed for information.

⟹ . . . *The report of the Committee on Cost Containment was* **FILED FOR INFORMATION** . . .

HEALTH MANPOWER AND RURAL MEDICAL SERVICE

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Health Manpower and Rural Medical Service are as follows:

Donald W. Bidwell, M.D., *Chairman*	Seneca
Sheppard Arluck, M.D.	Livingston
Robert E. Hentschel, M.D.	St. Lawrence
Dattatraya G. Lanjewar, M.D.	The Bronx
Leo J. Swirsky, M.D.	Kings
*Michael P. M. Pond	Erie

* Medical Student

[†] Following the meeting, it was learned that a brochure, somewhat similar in nature (if not in approach) on rising health care costs is currently in preparation at the behest of the Medicine/Business Coalition. Therefore, the Chairman requested that activities on the Cost Containment Committee project be postponed for the time being until further developments on this matter are ascertained.

The Committee held one formal meeting since the last annual report to the House of Delegates. The following matters were considered:

The Committee on Health Manpower and Rural Medical Service was concerned during the past year with clinical and professional activities of nonphysician practitioners throughout the State, principally physicians' assistants and nurse practitioners.

The Committee was apprised of a "consensus" bill due to go before the legislative session in 1982. If passed, this bill will legally entitle specially trained nurse practitioners to provide primary care services, without supervision, previously reserved for physicians. The New York State Education Department already certifies programs to train nurse practitioners, but, as it now stands, the current interpretation of the Nurse Practice Act severely limits the practice of graduates of these programs in this State.

In discussing the education of the physician as compared to other health professionals, it was pointed out that there is no parallel quality educational system in the United States for those principally and exclusively charged with ultimate responsibility for patient care. There is one major system in the U.S. that educates doctors to be doctors, undertaken by universities and their university medical schools. Nurse practitioners, chiropractors, midwives, etc., cannot obtain equal or equivalent training through other channels. If there is a deficiency in the training of physicians, the deficiency should be corrected, but physicians should not be supplanted by another type of medical personnel trained in some other way. The following motion was made, seconded, and unanimously passed:

> That the Committee approve the motion of the Council at its June 18th, 1981, meeting in opposition to any legislation which would legally permit nurse practitioners to set up an individual practice which does not include the direct supervision of a physician.

When this motion was referred to the Council, it was noted that the Council had adopted the following position at its meeting on April 23, 1982.

> The Medical Society of the State of New York opposes the concept of any legislation which would legally permit nurse practitioners to set up an independent practice of medicine as defined by diagnosis, treatment, and prescription writing.

In an effort to better define the de facto limits and duties of physicians' assistants in this State, the Committee invited the President of the New York State Society of Physician Assistants (NYSSPA), and his assistant, to one of our meetings. A lengthy and informative presentation by these gentlemen, followed by a question and answer period, allowed committee members to formulate more precise impressions of this organization, its goals, and its activities. Briefly, the President of NYSSPA stated that "the position of the PA is one of dependency requiring direct physician supervision." Furthermore, he informed the Committee that "their organization has no design to have their members become separate practicing entities," and "that PAs were created to provide specific assistance to physicians, with close supervision by physicians." A request by these NYSSPA representatives that an ad hoc committee be established as liaison between MSSNY and NYSSPA is being considered.

Committee members reacted favorably to statements by elected officials of the New York State Society of Physician Assistants and will take under careful advisement their request to have an ad hoc committee made up of representatives of their organization and MSSNY. The Committee recommended, following a request by the President of NYSSPA, that he be allowed to address the House of Delegates, with the proviso that the Speaker of the House of Delegates has the authority to develop the program for the House and that any request for an individual representing any organization to address the House must be made directly to the Speaker. It is within his prerogative to grant or deny such request; however, the wishes of the Committee will be made known to the Speaker.

Finally, the Committee watches with interest and pleasure the continuing efforts to establish a demographic survey of physicians throughout the State, hopefully to be completed in time for the annual House of Delegates meeting in November.

The Chairman expresses his appreciation to the members of the Committee for the time and effort they have devoted to matters coming before the Committee. He also wishes to thank Robert J. O'Connor, M.D., Director of the Division of Medical Services, Mr. Mario V. Menghini, Assistant Director, and Ms. Joan Reilly, Secretary, for their assistance, courtesy, and helpfulness.

Respectfully submitted,

Donald W. Bidwell, M.D., *Chairman*

■

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Health Manpower and Rural Medical Service be filed for information.

⟹ . . . *The report of the Committee on Health Manpower and Rural Medical Service was* **FILED FOR INFORMATION** . . .

HOSPITAL AND PROFESSIONAL RELATIONS

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Hospital and Professional Relations are as follows:

Herbert E. Joyce, M.D., *Chairman*	Erie
John M. Cammarata, M.D.	Westchester
Eunsun Cho, M.D.	Livingston
Richard L. Fenton, M.D.	Westchester
Antonio F. LaSorte, M.D.	Broome
Jason K. Moyer, M.D.	Broome
Lawrence Ravich, M.D.	Nassau
*Gerald W. Grass	Erie

The Committee held one formal meeting since the last annual report to the House of Delegates. The following matters were considered:

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* Medical Student

New York Academy of Medicine (NYAM) Guidelines for Attending Physicians and Residents. The NYAM guidelines, which address the sensitive and most important issue of hospital care relationships between attending physicians and residents, were reviewed and concurred with by the Committee. The committee members lauded the report of the Subcommittee on Hospital Practice of the Committee on Medicine in Society of the NYAM for its thoroughness in identifying this issue and the ensuing recommendations for resolving problems emanating from the provision of medical care to patients by attending physicians and residents. (See Appendix "A")

The Council, on September 9, 1982, approved the following recommendation of the Committee:

> That the Committee concur with the Guidelines of the Subcommittee of the New York Academy of Medicine for Attending Physicians and Residents and recommend Council approval of the guidelines as well as their dissemination to all hospitals with teaching programs (and/or house staffs) and department heads of such programs in New York State, and all constituent county medical societies.

Legality of Physicians Being Listed as Employees of Hospitals When Treating General Service Cases. A letter of September 18, 1981, from Harvey R. Leventhal, M.D., to the Chairman of Medical Liability Mutual Insurance Company (MLMIC), regarding the legality of hospitals providing medical malpractice insurance to physicians who care for service patients without remuneration, was reviewed and discussed by the Committee.

Following a lengthy discussion concerning legal precedent in this matter, Mr. Donald Moy, General Counsel, Medical Society of the State of New York (MSSNY), advised that hospitals may, if they desire, provide medical liability insurance to physicians who act as agents of institutions in providing care to patients.

Pennsylvania Medical Society (PMS) Ad Hoc Committee Study on Union-Like Organizations. The Committee reviewed the PMS survey and ensuing analysis of its membership's interest in union-like organizations to negotiate their economic affairs with providers of health care. The survey, which was conducted among selected physician groups who are either employed or work under some other type of contractual arrangement, e.g., anesthesiologists, radiologists, pathologists, emergency medicine, hospital medical directors, medical staff presidents, physical medicine/rehabilitation, etc., revealed that the membership would prefer the PMS to establish a mechanism for this purpose.

During discussion, it was identified that there has been an increasing physician interest in union-like activities. While sporadic major endeavors in New York State have not materialized, interns and residents, HMO based physicians, and some specialty medical societies have established organizations to negotiate for physicians in financial matters. However, national, state, and local medical societies have not taken the initiative to seriously consider this issue.

The Committee asserted that the MSSNY should be more aggressive in approaching this issue, i.e., negotiating on behalf of its membership concerning agreements, contracts, etc., with other providers of health care and functioning within existing law. Specifically, the MSSNY could interface:

a) as a consultant to individual doctors seeking positions in hospitals, medical facilities, etc.;

b) as a negotiator for physician specialty medical societies;

c) as negotiator for doctors organized as employee (nonunion) groups.

This activity could realistically be an opportunity to increase MSSNY membership, including every physician category throughout the State.

It was suggested that a union-like organization could establish separate subunits within its framework to deal with the various health insurance carriers concerning the economic aspects of physician participation in their programs, e.g., Medicaid, Workers' Compensation, Blue Shield, etc.

As a preamble to a Committee motion, the Committee commended the PMS's Ad Hoc Committee for its Study of Union-Like Organizations. Following are the PMS Ad Hoc Committee's tentative conclusions based on an analysis of the study in which there was a thirty-six percent (36%) overall response:

1. The survey study clearly showed that the respondents recognize a need for more service or support from organized medicine in the area of negotiating the terms and conditions of their working arrangements, i.e., legal services, sample contracts, negotiating techniques, etc. (49% of the respondents — almost two-thirds representing the specialties of anesthesiology, pathology, emergency medicine, and radiology — indicated an interest in joining an organization of professionals whose purpose would be to assist physicians in negotiating the terms and conditions of their working arrangements).
2. There is strong support for the PMS to take the lead in organizing a group to assist physicians in their negotiations (81.3% of the respondents felt the Society "should take the leadership in organizing such a group").
3. The concept of such an organization is strongly supported by younger physicians (51% of the PMS survey respondents are under age 50; and, 60% of all the respondents supporting the concept are under age 50).
4. It is quite likely there will be a need for the PMS to form a separate organization.
5. Membership in any such organization or eligibility for services should be based on PMS membership.

Based on the above, the PMS Ad Hoc Committee concluded that the Society should take the leadership in the development of a professional organization to assist physicians in negotiating the terms and conditions of their working arrangements. The PMS Committee, therefore, recommended to its Board of Trustees, the further development of the concept of a professional organization for this purpose.

On September 9, 1982, the Council considered the following six (6) recommendations of the Committee on Hospital and Professional Relations:

1) Establish a program for negotiation services for those

physicians that are either contractors or employees, or organized in groups as contractors or employees.

2) Investigate the possibility of starting a legal test case in reference to establishing negotiation potential for physicians signed up as paid-in-full participants on an individual contract basis, e.g., Blue Shield and Medicaid Programs. The group in each program would be individually established as a unit for negotiating terms of their participation.
3) Implement research in the concept of offering negotiation services (requiring legal opinions). Conduct surveys to ascertain membership interest and comments in this type of service by MSSNY.
4) Fill the void in MSSNY's offerings of services to practicing physicians in the delivery of service in practice plans, groups, and as employees.
5) Offer residents/new physicians instructions on how to negotiate a contract with a medical facility, group, or other physicians.
6) Have the Legal Department render an opinion as to the legality of participating in such activities within the framework of the MSSNY Charter.

The Committee deems this issue to be of sufficient importance to require a budget allocation to be recommended at a later date by the Council.

The action by the Council on September 9, 1982, was to pass recommendation number 6 and, after a report from General Counsel, further consider the remainder of the recommendations.

The Chairman of the Committee expresses his appreciation to the members of the Committee for the time and effort they have devoted to the work of the Committee. He also wishes to thank Robert J. O'Connor, M.D., Director of the Division of Medical Services, Mr. Mario V. Menghini, Assistant Director, and Ms. Joan Reilly, Secretary, for their efforts and diligence.

Respectfully submitted,

Herbert E. Joyce, M.D., *Chairman*

APPENDIX "A"

THE NEW YORK ACADEMY OF MEDICINE
2 East 103rd STREET, NEW YORK, N.Y. 10029

May 27, 1981

FROM: Development and Public Relations Office

For additional information, please call George H. Weiler, Jr. (Development and Public Relations) or Dr. Marvin Lieberman, Committee of Medicine in Society, at 212-876-8200, Ext. 262 and 250, respectively.

FOR RELEASE: *Immediately*

NEW YORK ACADEMY OF MEDICINE ISSUES GUIDELINES FOR ATTENDING PHYSICIANS AND RESIDENTS

NEW YORK, May 27—The New York Academy of Medicine (NYAM) has approved guidelines to resolve the conflict between attending physicians and residents over the increasing authority assigned to residents in hospital patient care. These guidelines are a result of a two-year study conducted by the Subcommittee on Hospital Practice at NYAM and are reported in the May, 1981, *Observer* of the American College of Physicians.

These standards advocate: explicitly defined and *written* residency training policies made available to the public by the institution; definition of authority and responsibility, with central authority belonging to the attending physician; measured and graded assumption of authority by residents under close supervision of attending staff; discretionary resident participation in surgical or other potentially hazardous procedures; and candid explanation to patients regarding the functions of the health team to facilitate his making an educated choice in accepting or declining treatment by hospital staff other than the primary physician.

The consensus of the study indicates that good education and good patient care can go hand-in-hand, once attending physician and resident roles are carefully defined.

# # # #

REPORT*

SUBCOMMITTEE ON HOSPITAL PRACTICE OF THE COMMITTEE ON MEDICINE IN SOCIETY THE NEW YORK ACADEMY OF MEDICINE

NOTE OF TRANSMITTAL:

This subcommittee† was formed in January, 1978, and was charged with the study of some of the moral dilemmas and organizational conflicts arising out of the increasing authority assigned to residents.

The subcommittee held many meetings with persons with varied experience in residency training programs. Those participating included chiefs of services, residents, and attending physicians. In addition, individual members of the committee interviewed persons in such capacities at several teaching and university affiliated hospitals in the city, both in the municipal and in the private sectors.

The Committee on Medicine in Society first dealt with this problem 8 years ago, when a subcommittee, chaired by Dr. Edward Tolstoi, reviewed emerging conflicts between the attending physician of record and hospital residents in the light of accommodation to the changing demands of graduate medical education. In April, 1978, these problems were discussed at the Academy's Annual Health Conference on "The Hospital Revisited," under the auspices of this Committee. The medical, legal, and moral aspects were addressed by Martin Kempner, Ph.D., New York Council for the Humanities Philosopher-in-Residence at the New York Academy of Medicine; Alasdair MacIntyre, Professor of Philosophy, Boston University; Stuart Orsher, M.D., Senior Resident in Medicine, Lenox Hill Hospital; John K. Guck, M.D., and Joseph Post, M.D., both practicing physicians. These papers were published in the Academy's *Bulletin*, January, 1979.

Because of this earlier experience and a diversity of membership which includes practicing physicians, administrators, industrial physicians, and non-physician experts in medical care, the Committee on Medicine in Society offers an appropriate forum for a balanced review of this problem. We are not the only unit in the Academy of Medicine that has been involved with the issue of the training of hospital residents. This is a primary concern of the Committee on Medical Education, which, in October, 1977, conducted a symposium on Ethical Concerns in Medical Education. Edmund D. Pellegrino, M.D., then of Yale University Medical Center, and now President of the Catholic University of America; Stanley E. Bradley, M.D., of Columbia College of Physicians and Surgeons; and Francis D. Moore, M.D., of Harvard Medical School were among the participants. The proceedings of this conference appeared in the *Bulletin* of the New York Academy of Medicine, July-August, 1978.

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* This report was approved by the Council of the New York Academy of Medicine and a summary of the report appeared in the American College of Physicians' *Observer* in May, 1981.

† Its members were Dr. John K. Guck, Chairman, and Drs. J. Lester Gabrilove, August H. Groeschel, Philip E. Henig, Cyril J. Jones, and Peter Rogatz.

FOCUS OF THE REPORT

This report is about the adequacy of supervision of surgical and other residents working with hospitalized patients; the extent to which patients are fully informed about the role of the resident, and the resolution of conflicts between the attending physician of record and residents on decisions for patient treatment and the writing of orders.

BACKGROUND

The basic reference document on residency training programs is "Essentials of Accredited Residencies, Revised July 30, 1978" which appears in the *1978–79 Directory of Residency Training Program, Accredited by the Liaison Committee on Graduate Medical Education*, published by the American Medical Association.

> "Residencies in the clinical divisions of medicine, surgery, and other special fields provide advanced training in preparation for the practice of a specialty . . . . While the educational program is supplementary to the primary purpose of the hospital, i.e., the care and management of patients, it is directly related to this function in that it serves to improve the quality of medical care offered." (p. 11).

Most physicians and informed laymen will agree with this statement, but it is important to emphasize that, unless certain specific conditions are met in these educational programs, neither good education nor good patient care will result. Indeed, as Francis D. Moore has emphasized, unless these conditions are met, two important moral values in graduate teaching programs may well come into conflict: "the moral imperative to teach a young generation and the moral imperative that each patient have the most skillful person available to operate upon him." . . . . Most residency program directors would hope to reconcile these objectives so that conflict will not occur.

The establishment of most specialty boards in the 1930s gave great impetus to residency training. Before World War II, residency training programs were found largely in university hospitals. There were comparatively few such institutions and their participants often continued in training for many years. The patients in such programs were usually the poor. After World War II, large numbers of physicians sought postgraduate training, these programs expanded to include community hospitals, some affiliated with medical schools. The quality of training has varied from one institution to another. It has been accepted by the profession and the public that such teaching programs lead to an improved level of quality of care. The appropriate specialty boards set training standards and residency review committees are responsible for the adherence to training standards. Upon completion of formal training, residents take qualifying examinations for specialty board certification. The vast majority of medical school graduates enter such programs.

Good training and good patient care can and do co-exist under a variety of residency program arrangements. An essential ingredient in these arrangements is the principle of close supervision by a responsible physician or surgeon, with the patient informed about the respective roles of the resident and the attending physician in his or her care.

The American College of Surgeons in its requirements for graduate education (*Bulletin*, American College of Surgeons, September–October, 1970, p. 15) stated: "During the course of his training, the resident should be given sufficient operating responsibility to acquire skill and judgment. This experience should be progressively graded to the end that, on completion of his training, the resident is able to assume individual responsibility for major surgical procedures." However, this role for the resident in the care of private patients should not be purchased at the price of effective exclusion of the physician of record from the patient's treatment.

Who determines what the resident is competent to undertake and whether the best interests of the patient are being furthered? Specific practices as well as policies require review. Specific arrangements for supervision of residents must be explicit. Adequate supervision should assure, for example, that the tests done on patients are required and cause no unnecessary harm or discomfort to the patient, and are humanely and economically employed.

The key to establishing a good patient care and educational service is the quality of supervision by the chief of the department. Chiefs of service should be role models who are committed to excellent patient care and good training. In the testimony of one outstanding supervisor of a training program, "a chief of a teaching service should understand that he must subordinate other career objectives to the primary one of supervision of his residents."

WHAT THE PATIENT SHOULD BE TOLD ABOUT THE ROLE OF THE RESIDENT IN HIS TREATMENT PROGRAM

The information given to patients about the roles of the personnel involved in their care needs to be improved. Our interviews confirm that, where full explanation is given, the patient response is excellent.

It is in the best interests of both patients and physicians that the role of residents in hospitals be presented with candor. No euphemisms or subterfuges are justified.

Because the patient has the right to be free from physical and bodily harm and to exercise autonomy over his person, the patient has the right to know what arrangements are being made to insure good care. Unless the public understands the role of the resident, and is given evidence that a well run graduate program often provides better patient care than a non-teaching program, confidence on the part of the public in teaching programs will decline. For example, patients should know that residents provide around the clock attention during unforeseen emergencies.

Each hospital should provide written rules which are available to the public, and which define explicitly the residency training policies that prevail in that institution. Patients should be informed about the specific roles of the resident and the attending physician of record before, during, and after a procedure. We believe that such frequently used phrases as the "attending physician will be responsible," or "will manage the team," are not an adequate description of what actually takes place.

GENERAL RECOMMENDATIONS

It is essential that patients be assured of a compassionate and candid relationship on the part of those providing hospital care. The training of young physicians in hospitals in the care of all patients must be sustained in order to assure the development of physicians of the highest quality and competence. To obtain the best possible treatment of result, we offer these recommendations:

WITH RESPECT TO THE ATTENDING PHYSICIANS AND RESIDENTS:

1. The attending physician of record should have central and pivotal authority in the decisions made about the care of his patients since he is morally and legally responsible for that care. On or before admission, and at appropriate times thereafter, the physician should discuss the management with house staff assigned to the specific hospital area. Cooperation between house staff and the responsible physician is an obvious necessity for good patient care. When unable to be in attendance, the physician of record should designate a competent surrogate acceptable to the patient.

2. The assumption of authority by physicians in training for patient care should be stepwise, graded and under close supervision of the responsible hospital attending staff, as required by the respective specialty boards.
3. The performance by house staff of special procedures that entail potential hazard, such as invasive procedures, endoscopy, liver biopsy, etc., should be supervised by an attending physician experienced in such procedures.
4. The level of participation in surgical procedures by the physician in training should be at the discretion of the attending physician and chief of service. It should be consistent with the trainee's level of competence. In surgical operations the responsible surgeon of record should be in attendance throughout.

With Respect to the Patient:

1. It is the responsibility of the physician of record to acquaint the patient with the projected plan of care including the level of participation of other physicians, including hospital residents.
2. The patient has a right to refuse to be examined, observed, or treated by residents, medical students, or any other member of the hospital staff. However, the patient should be educated to the value of the availability of members of the hospital staff during off hours and emergencies and to the desirability of familiarity with these clinical conditions.
3. These recommendations should apply to all patients. The method of payment or the type of hospital accommodation assigned is irrelevant.

With Respect to Hospital Supervisory Staff:

The directors of service should acknowledge the monitoring of the quality of medical care delivered by their respective services as their primary responsibility. This should take precedence over any other mature clinical judgment, committed to patient care and to the training of residents are indispensable for good patient care and good graduate medical education.

Attending physicians and residents who fail to observe proper rules of supervision or informed consent in these matters should be considered for dismissal, on recommendation of the governing board and by chief of service.

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⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Hospital and Professional Relations be filed for information.

⟹ *The report of the Committee on Hospital and Professional Relations was* **FILED FOR INFORMATION** . . .

Resolution 82-51, Position of Attending Physicians and Residents in the Care of the Patient

Introduced by New York County Medical Society

Whereas, New York County Medical Society's Committee on Hospital-Physician Relations noted that the Medical Society of the State of New York, at its Council meeting on September 9, 1982, approved recommendations of the New York Academy of Medicine (May 27, 1981) re guidelines to resolve the conflict between attending physicians and residents over the increasing authority assigned to residents in hospital patient care; and

Whereas, New York County Medical Society's Board of Directors, at its meeting on June 14, 1982, upon the recommendation of the Committee on Hospital-Physician Relations, endorsed in principle the Report of the New York Academy of Medicine but adopted, in addition, the following statement as the position of the New York County Medical Society with regard to the attending physician and the resident in the care of the patient; therefore be it

Resolved, That the Medical Society of the State of New York adopt this statement as part of its official position to be included in its approval of the New York Academy of Medicine's Guidelines for Attending Physicians and Residents:

"While recognizing the importance of the contributions of the resident staff to patient care and while accepting the responsibility to teach and communicate frequently with the resident staff, the attending physician of record must retain his morally and legally mandated responsibility in the management of his/her patient's care. Examples of encroachment upon this responsibility include:

"1. Prohibition of order writing or chart notations by the attending physician.

"2. The unilateral making of elective therapeutic decisions or the undertaking of invasive diagnostic procedures by the resident staff without appropriate consultation with the attending physician.

"3. The ordering of consultations without prior discussion with the attending physician.

"4. The placing of arbitrary limitations on the selection of consultants.

"5. The delegation to the resident staff of administrative authority regarding patient admissions.

"These practices are condemned as inimical to high quality patient care.

"With respect to the patient, his/her right to freely select his/her own physician must be guarded and maintained. There must be no doubt in the patient's mind as to who is the responsible physician of record. Furthermore, this individual shall be so designated in the hospital record.

"No assignment of attending physician shall be made without prior discussion of available options with the patient, and then only with his/her full knowledge and freely given consent."

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⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

Your reference committee has considered Resolution 82-51 and wishes to present the following substitute resolution:

Resolved, That the Medical Society of the State of New York adopt this statement as part of its official position to be included as a supplement to its approval of the New York

Academy of Medicine's Guidelines for Attending Physicians and Residents:

Because optimum care of hospitalized patients often entails technically sophisticated treatment modalities, reliance on the expertise of specialists and consultants, and frequent clinical assessments and judgments by house officers or other designees of the attending physician — it is imperative to specifically indicate the authority and responsibility for decisions about treatment and management. Ethically and legally, a patient's attending physician or surgeon possesses this authority and responsibility. The existence of a continuing physician-patient relationship indicates the mutual endorsement of this fact.

Although the patient's own physician clearly retains ultimate responsibility for patient management, close collaboration between his/her own physician and the involved house officers and specialist consultants will provide the highest quality of patient care. Features of this collaboration should include at least the following:

1. Frequent discussions and review of the patient's course by the attending and other involved physicians.
2. Explicit approval and/or supervision by the attending of invasive, hazardous, or complex diagnostic or treatment procedures.
3. Explicit approval by the attending of the indications or requests for consultations, and of the choice of consultant.
4. Recognition by the attending of his/her responsibility to contribute to the education, training, and learning experience of the house staff.
5. Conscientious efforts by the house staff and other involved physicians promptly to inform the attending of unexpected changes in the patient's condition or needs for treatment.
6. Recognition by both attendings and house officers that they share responsibility for writing orders, recording observations, or formulating analyses or treatment goals in the progress notes.

These guidelines will best serve the goals of optimum care for the patient and of quality training for young physicians.

The attending physicians, hospital administrations, and house officers have the obligation to respect these guidelines and candidly to inform the patient of the roles of the various physicians in that patient's care. In such explanations, the patient's right freely to select his/her own physician must be maintained. No assignment of attending physician shall be made without prior discussion of available options with the patient, and then only with his/her full knowledge and freely-given consent.

⟹ Your reference committee recommends adoption of the substitute resolution for Resolution 82-51.

After discussion, the House amended the substitute resolution to read as follows:

Resolved, That the Medical Society of the State of New York adopt this statement as part of its official position to be included as a supplement to its approval of the New York Academy of Medicine's Guidelines for Attending Physicians and Residents:

Because optimum care of hospitalized patients often entails technically sophisticated treatment modalities, reliance on the expertise of specialists and consultants, and frequent clinical assessments and judgments by house officers or other designees of the attending physician — it is imperative to specifically indicate the authority and responsibility for decisions about treatment and management. Ethically and legally, the patient's freely selected attending physician possesses this authority and responsibility. Such action will strengthen the patient-physician relationship essential to the continuity of a patient's care.

The patient's own physician clearly retains ultimate responsibility for patient management, but close cooperation between his/her own physician and the involved house officers and specialist consultants is essential to provide the highest quality of patient care. Features of this cooperation should include at least the following:

1. Ongoing discussions and review of the patient's course by the attending and other involved physicians.
2. Explicit approval and/or supervision by the attending of invasive, hazardous, or complex diagnostic or treatment procedures.
3. Explicit approval by the attending of the indications or requests for consultations, and of the choice of consultant.
4. Recognition by the attending physician to contribute to the education, training, and learning experience of the house staff.
5. Conscientious efforts by the house staff and other involved physicians promptly to inform the attending of unexpected changes in the patient's condition or needs for treatment.
6. Although there is recognition by both attendings and house officers that they share responsibility for writing orders, recording observations, or formulating analyses or treatment goals in the progress notes, the ultimate authority for patient care is the patient's attending physician.

These guidelines will best serve the goal of optimum care for the patient and will enhance the quality training for young physicians.

The attending physicians, hospital administrations, and house officers have the obligation to respect these guidelines and the attending physician shall candidly inform the patient of the roles of the various physicians in that patient's care. In such explanations, the patient's right freely to select his/her own physician must be maintained. No assignment of attending physician shall be made without prior discussion of available options with the patient, and then only with his/her full knowledge and freely-given consent.

⟹ . . . *The House, after considerable discussion, voted to* **ADOPT** the amended substitute resolution for Resolution 82-51 . . .

IPA/HMO

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on IPA/HMO are as follows:

Charles Weller, M.D., *Chairman*	Westchester
Leonard Barron, M.D.	Broome
Thomas E. Cardillo, M.D.	Monroe
Franklyn C. Hayford, M.D.	Schenectady
Charles S. LaMonte, M.D.	New York
*Frederick D. Grant	Onondaga

The Committee held one formal meeting since the last annual report to the House of Delegates. The following matters were considered:

MSSNY HMO Position Paper. Currently about 10.2 million individuals receive their health care through 240 functioning HMOs of all types in the U.S. The Department of Health and Human Services (HHS) is making a concerted effort to find ways to make the HMO option more appealing and available to federal beneficiaries. A number of procompetition proposals in the Congress have put emphasis on the HMO concept as a desirable method of providing quality care at a reasonable cost.

Committee members decided that the essence of some of the AMA's six (6) points (adopted in June, 1981) should be incorporated in the MSSNY position paper. The following points of the HMO Position Paper were unanimously approved by the Committee and recommended for approval by the Council:

It is the position of the Medical Society of the State of New York that:

(a) the HMO/IPA concept is a valid and acceptable alternative health care delivery system; but that
(b) no single pattern of health care delivery is necessarily suited to all patients or to all physicians; and that
(c) there must be available multiple alternative delivery mechanisms among which both the patient and the physician can truly exercise the right of free choice of how they will receive and disburse quality medical care; and that
(d) a legitimately recognized health care delivery system, regardless of the cost potential, should have equal participation in a free market; and that
(e) employers should contribute equal amounts for each employee's health benefit plan, regardless of the plan selected; and that
(f) following AMA policy, "fair market competition among all systems of health care delivery is mandatory, with the potential growth of HMOs being determined not by federal subsidy, preferential federal regulations, and federal advertising promotion, but by the number of people who prefer this mode of delivery."

The Council, on March 25, 1982, approved the HMO Position Paper. On April 5, 1982, a letter was sent by Edward Siegel, M.D., Executive Vice-President, to the Chairman of the Committee informing him that the position will be included in the Manual of Official Position Papers and will be printed in the *New York State Journal of Medicine* in conjunction with the proceedings of the 1982 House of Delegates.

The Chairman expresses his appreciation to the members of the Committee for the time and effort they have devoted to the work of the Committee. He also wishes to thank Robert J. O'Connor, M.D., Director of the Division of Medical Services, Mr. Mario V. Menghini, Assistant Director, and Ms. Joan Reilly, Secretary, for their efforts and diligence.

Respectfully submitted,

Charles Weller, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on IPA/HMO be filed for information.

⟹ . . . *The report of the Committee on IPA/HMO was* **FILED FOR INFORMATION** . . .

INTERSPECIALTY

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Interspecialty are as follows:

Edward C. Sinnott, M.D., *Chairman* (*Anesthesiology*)	Nassau
Herbert Lansky, M.D., *Vice-Chairman* (*Pathology*)	Erie
Alfred B. Amler, M.D. (*Pediatrics*)	Westchester
Harold E. Berson, M.D. (*Psychiatry*)	Kings
Philip C. Bonanno, M.D., (*Plastic and Reconstructive Surgery*)	Westchester
Stephen Braitman, M.D. (*Urology*)	Suffolk
Lois E. Brennan, M.D. (*Family Physicians*)	Ontario
Stephen Burstein, M.D. (*Neurosurgery*)	Nassau
Bruce Campbell, M.D. (*Otolaryngology*)	Nassau
Stephen A. Gettinger, M.D. (*Obstetrics and Gynecology*)	Suffolk
Franklin S. Glickman, M.D. (*Dermatology*)	Kings
Leo A. Green, M.D. (*Orthopedic Surgery*)	Queens
Robert M. Kohn, M.D. (*Internal Medicine*)	Erie
Theodore C. Max, M.D. (*General Surgery*)	Oneida
John O'Brien, M.D. (*Ophthalmology*)	Suffolk
Victor A. Panaro, M.D. (*Radiology*)	Erie
Asa Ruskin, M.D. (*Physical Medicine and Rehabilitation*)	Kings
John E. Spoor, M.D. (*Emergency Medicine*)	Otsego

Since its last report to the House of Delegates, the Committee on Interspecialty met on one occasion and the following matters were discussed:

The Committee was informed that Mr. William Kroeger, Chairman of the Workers' Compensation Board, had appointed a Committee of the Workers' Compensation Board to study, revise, and update the current Workers' Compensation Medical Fee Schedule and to present their report to him through the Advisory Committee on the Medical Fee Schedule and Allied Problems. Max N. Howard, M.D., former Director, Division of Medical Services, has been appointed to the Committee and is actively participating in carrying out the directive of the Chairman. The Committee noted that MSSNY cannot participate in discussions relative to Relative Value Scale changes, but felt that input into the revision procedure was proper in terms of suggesting deletions, additions, and modifications of various procedures. It was noted that Dr. Howard is aware of the opinions of the Interspecialty Committee and will undoubtedly consider any recommendations that have been submitted, or will be submitted in the future. A timetable for completion of this report has not been established at this time.

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* Medical Student

Microdissection/Microsurgery. The following motion, developed by the Workers' Compensation and Occupational Health Committee, was read to the committee members for information.

> That the line item (64700) used in reporting a microdissection technique, in addition to the procedure, be removed as a specific notation and that the unit value for each procedure be appropriately adjusted to reflect the use of a microdissection technique where this type of instrumentation is necessary for the successful performance of a given procedure.

The problems presented in this area and in particular the proper interpretation and billing usage of line item 64700 in the 1973 Workers' Compensation Medical Fee Schedule was presented. This involves the proper application of this line item in terms of the using of magnifying loupes and dissecting microscopes. The guidelines are vague and require classification.

This topic was discussed in some length, but it was felt that this Committee as a whole could not make recommendations and that it should be properly discussed by a subcommittee consisting of members of the specialties using magnifying techniques. The Chairman appointed an Ad Hoc Committee to develop recommendations for submission to the Council. Dr. Stephen Burstein was named Chairman with representatives from general surgery, vascular surgery, neurosurgery, obstetrics/gynecology, ophthalmology, orthopaedics, otolaryngology, plastic and reconstructive surgery, and urology to be represented.

It was then requested that the Council not consider the motion of the Workers' Compensation and Occupational Health Committee until such time as the Ad Hoc Committee could study the problem and come up with the appropriate recommendation at which time the Council would have the thoughts of both committees to discuss and decide MSSNY policy.

The Ad Hoc Committee on Microsurgery Techniques met and discussed the entire problem in great length. The following recommendation resulted from this discussion. It was moved, seconded, and passed unanimously:

> That line item 64700 of the 1973 Workers' Compensation Medical Fee Schedule be left unchanged since it refers only to that section involving nerve repair and since microdissection techniques include optical magnification through various recognized modalities (loupes vs. microscope) reimbursement for use of such devices should be based upon a detailed operative report.

It should be noted that the reports of both the Interspecialty Committee and the Workers' Compensation and Occupational Health Committee were discussed together at the May 27, 1982, meeting of the Council. The Council voted to approve the recommendation submitted by the Workers' Compensation and Occupational Health Committee. Such action will be transmitted to the Chairman of the Workers' Compensation Board.

Nurse Practitioner Bill. It was noted that the President of the Medical Society of the State of New York attended the Collegium on Expanded Nursing Practice which was sponsored by the New York State Assembly Committee on Higher Education. The State Society indicated clearly that the MSSNY is opposed to the independent practice of medicine by nurses without a supervisory role by a physician. The Committee reaffirmed the Council's position on the nurse practitioner bill and the following recommendation was introduced for Council action.

> That this committee go on record to suggest to the Council that they try to get a unified health bill in the State of New York and to keep a watchful eye on any profession which is involved in writing prescriptions.

The Council on April 22, 1982, referred this recommendation back to the Committee for further consideration and clarification.

The Chairman of the Committee expresses his appreciation to the members of the Committee for the time and effort they have devoted to the work of the Committee. He also wishes to thank Robert J. O'Connor, M.D., Director of the Division of Medical Services, Mr. Mario V. Menghini, Assistant Director, and Mrs. Jeanette Palucci, Secretary, for their conscientious efforts and diligence.

Respectfully submitted,
Edward C. Sinnott, M.D. *Chairman*

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⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Interspecialty be filed for information.

⟹ . . . *The report of the Committee on Interspecialty was* **FILED FOR INFORMATION** . . .

MEDICAID

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Medicaid are as follows:

Raul Pohorille, M.D., *Chairman*	Bronx
Donald L. Brooks, M.D.	Chemung
Harvey Coopersmith, M.D.	Kings
Joseph B. Enders, M.D.	Onondaga
Franklin P. Guneratne, M.D.	Orange
James B. McDaniel, Jr., M.D.	Erie
Alfred Moldovan, M.D.	New York
Nathan P. Reed, M.D.	Albany
Felix R. Rosenhain, M.D.	Queens
Edward C. Sinnott, M.D.	Nassau

Donald K. Stockdale, M.D.	Monroe
Betty L. Voelker, M.D.	Warren
Sidney S. Weinstein, M.D.	Monroe
Leonard S. Weiss, M.D.	Nassau
*Brian F. Sands	Onondaga

Since its last report to the House of Delegates, the Committee on Medicaid met on three occasions and the following matters were discussed:

Resolution 81-30, Medicaid Audits of Physician Billing Procedures.

Resolved, That the Medical Society of the State of New York make known to the New York State Department of Social Services its extreme dissatisfaction with the present system of audit and that it apply the technical, legal, and manpower resources necessary to seek relief from the practices currently employed in the audit procedure; and be it further

Resolved, That the MSSNY actively consider and retain as a viable option a legal challenge to the current audit procedures.

It was reported to the Committee that this resolution was reviewed by the Legal Department of MSSNY and they felt that this should be held in abeyance pending the outcome of the Broome County hearings. It was moved, seconded, and approved unanimously that this resolution be tabled until such time as the legal hearings currently pending in Broome County are resolved.

The Council, at its meeting on April 22, 1982, voted to table Resolution 81-30 until such time as the legal hearings currently pending in Broome County are resolved.

Resolution 81-34, Medicaid Reimbursement.

Resolved, That discussions relative to increased Medicaid reimbursement continue at an accelerated pace between the Government of the State of New York and the Medical Society of the State of New York; and be it further

Resolved, That proposed increases more closely reflect usual and customary fees; and be it further

Resolved, That if the discussions are not productive in a reasonable time period, that MSSNY inform the membership in a clear and forthright manner.

The Committee emphatically felt that the physicians in New York State are not going to get a fee increase, that they are up against a stone wall as far as the State is concerned. It was stated that if information such as this could be publicized, making people aware that fees still remain at 1968 rates, perhaps this would get to the legislators and perhaps some political action will take place. However, in spite of this bleak outlook continued pressure will be exerted to achieve a change.

It was moved, seconded, and approved by a vote of 6 to 4 that the issues of this resolution are dealt with in the proposed position paper (see Medicaid Position Paper on page 582) and that the intent of this resolution would be met by approval of the position paper along with its wide dissemination throughout the State via the *News of New York*.

This motion was approved by the Council at its meeting on April 22, 1982.

Resolution 81-33, Prescriptions for Medicaid Patients.

Resolved, That the Medical Society of the State of New York enter into discussions with the appropriate New York State officials, and the appropriate State Pharmaceutical Association officials, to simplify the regulations for prescribing medication for Medicaid patients.

It was noted that the Medicaid Formulary is made up by pharmacists and physicians selected by the pharmacists. No attempt has been made to secure input from the State Medical Society. It was further noted that certain minimal federal guidelines are established but that states can alter their own requirements as long as they meet the minimal federal specifications. It was of the opinion that the MSSNY should make an effort to enter into discussions with the pharmaceutical association(s) and attempt to secure an understanding as to how the entire prescribing problem can be simplified and be made more efficient.

A motion was made, seconded, and passed unanimously that the intent of this resolution be explored with the pharmaceutical association and with such other responsible governmental agencies that are involved in this area.

This motion was approved by the Council at its meeting on April 22, 1982.

This recommendation was followed up. The Westchester County Medical Society, which introduced the resolution, was contacted in an effort to obtain more detailed information as to the nature of the actual problem and to have the physicians in that area, who are directly concerned, provide MSSNY with concrete illustrations of the problem. The pharmaceutical societies have been contacted and are willing to meet when we can present specific statements of the problem. This problem will be continually monitored.

Resolution 81-44, An Investigation of the Medicaid Management Information System (MMIS).

Resolved, That the Medical Society of the State of New York make every effort to have the Medicaid Management Information System contract re-evaluated to determine its effectiveness.

The intent of this resolution is that MSSNY make every effort to have the MMIS contract re-evaluated to determine its effectiveness. The Legal Department of the MSSNY informs us that there is no simple way that we could accomplish the intent of this resolution.

A motion was made, seconded, and passed unanimously by the Committee that, since Legal Counsel has advised us that the intent of this resolution could not readily be accomplished, Resolution 81-44 be tabled.

The Council, at its meeting on April 22, 1982, referred Resolution 81-44 back to the Committee on Medicaid pending further information on this matter.

Resolution 81-53, Payment for Specialized Services Under Medicaid.

Resolved, That the Medical Society of the State of New York seek the rescission of Section 505.2(f)(ii) of the Regulations of the Department of Social Services; and be it further

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* Medical Student

> **Resolved,** That all services which are provided by physicians who have been authorized by their hospital to render such services qualify for reimbursement under Title XIX.

The Division Director stated that he has researched the accuracy of the facts presented by the Medical Society of the County of Oneida in this resolution, and noted the following:

> The regulation referred to in the first whereas is inaccurately identified. It should be 505.2(ii) and not 505.2(f)-(ii) as stated, and is found in the Department of Social Services Regulations (18 New York Codes, Rules and Regulations). Additionally, it is taken out of context with respect to the rest of the section. The regulation does not state that *only* Board certified physicians are the *only* physicians that can be reimbursed under Medicaid, but outlines five methods by which a physician can be recognized as a specialist eligible to receive reimbursement. This section applies to Medicare. However, it has been taken word-for-word and included in the MMIS Provider Manual, Section 2.2.1 C as qualifications under Title XIX.

The first whereas, preceding above resolves, is as follows:

> *Whereas,* Section 505.2(f)(ii) of the Social Services regulations provides that only Board certified physicians qualify for payment for specialty services rendered to Medicaid patients.

> Since the facts in the initial whereas as quoted are inaccurate, the whereases following and the resolves are faulty and, if successfully pursued as passed by the House, would defeat the very intent of the resolution.

The Executive Committee recommended that, based on the additional information received, the resolution should not be implemented.

The introducer of the resolution, the Medical Society of the County of Oneida, will be so informed and will be asked to comment.

This recommendation was approved by the Council at its meeting on December 17, 1981.

Position Paper on Medicaid. The Committee was charged with updating the then current Position Paper entitled "Medical Care of the Indigent" to reflect current thinking and facts as they now exist.

On April 22, 1982, the Council approved the following:

MEDICAID POSITION PAPER

The position of the Medical Society of the State of New York is that all Title XIX (Medicaid) recipients must have equal access to high-quality health care along with freedom of choice as to the source from which they receive such care. This quality care should be delivered in an efficient manner by appropriately recognized and varying alternative mechanisms of medical care delivery.

Reimbursement for medical services rendered to Title XIX (Medicaid) patients must be based on a realistic fee pattern, in keeping with current economic realities and with the physician mode of practice. Such fee patterns must be subject to periodic adjustments in the same manner as are all other recognized alternative mechanisms of medical care delivery.

Further, there should be a

1. Return of Medicaid patients to the offices of practicing physicians by revising the New York State Medicaid Fee Schedule to provide usual and customary fees, or to implement a realistically higher fixed fee schedule.
2. Well-developed peer review system, administered by physicians at the local level and providing for an adequate appeals mechanism through physician ombudsmen.
3. Development of a program that would provide incentives to physicians for locating in underserved areas.
4. Unification of administrative and fiscal Medicaid responsibilities within a *single* Department at the State level.

Representation on New York State Council on Health Care Financing Study Groups. The Chairman of the Commission on Medical Services informed the Council at its meeting on April 22, 1982, that he had received a communication from the New York State Council on Health Care Financing, requesting that the MSSNY be represented on two study groups. The Commission Chairman will represent MSSNY on the study group on "Non-Institutional Reimbursement," and the Director of the Division of Medical Services will represent the MSSNY on the study group on "The Care of the Medically Indigent." These task forces are now meeting and will present their reports by the end of 1982.

Open Discussion of Medicaid Problems. The Committee met with representatives of the Department of Social Services (DSS) and Bradford Administrative Services, Inc., (BAS) and discussions concerning the Medicaid program and related problems ensued. The following facts were elicited:

- financial support of the New York State Medicaid Program consisted of 50% Federal funds, 25% State funds, and 25% local contributions.
- there will be a 3% reduction in federal contributions for Fiscal Year 1982 and New York State will likely recoup 2% of the reduction in 1982 via an effective Third Party Recovery program and an effective Cost Containment Program.
- by February, 1982, the MMIS will be implemented throughout the State and the Medicaid HCFA Common Claim Form will subsequently be available during the latter part of 1982.
- the Regional HCFA office (Baltimore) will soon present a paper requiring utilization CPT-4 (or CPT-5) coding in conjunction with the Common Claim Form, and in an effort to implement a unified coding system.
- a distribution of Medicaid payments are: 29% nursing homes; 3.7% physicians; 36% in-patient; 17% out-patient and clinic; 3.4% pharmacies; remaining percentage, all other categories.

The Vice-President of BAS advised that remittance statements to providers identify why claims are pended, which is done on a cumulative basis. He stated that there is no profit in BAS purposely pending claims since BAS is essentially compensated for its services on a fixed reimbursement basis regardless of the number of claims processed and reprocessed. He emphasized that it is in fact an administrative cost disadvantage for BAS to pend and reprocess claims.

It was further identified that BAS performance is constantly monitored by the DSS, Division of Audit Control, State Department Comptroller, and Federal Auditors of U.S. Department of Health and Human Services.

The Committee members were informed of the bi-monthly meetings that will be held between MSSNY staff of the Division of Medical Services and BAS, and DSS representatives in an effort to resolve Medicaid problems encountered by physicians. The BAS representative offered to have members of the carrier's Provider Relations staff visit specific physician areas to analyze and resolve problems.

Medic Alert Membership. The Medic Alert Foundation International has asked for our support and assistance in securing Medicaid reimbursement for the one time $15.00 lifetime membership fee in the Medic Alert emergency medical identification system.

The Council, at its meeting on September 10, 1981, endorsed the principle of having Medic Alert membership recognized as a medically necessary Medicaid expense when prescribed by a physician.

This endorsement was sent to the Commissioner of Health who subsequently notified MSSNY that this could not be paid for with Title XIX funds.

Proposed Move of Medicaid Office from New York City. The New York State Department of Social Services (NYSDSS) is planning to move the Medicaid Management Information System (MMIS) from New York City to Albany. The move would be made when the current contract expires in October.

At the time of this writing, the move to Albany will take place and be operational about November 1, 1982. The new fiscal intermediary — "McAuto Systems Group, Inc.," a subsidiary of McDonnell Douglas, has been granted a three-year contract and will be the new fiscal intermediary replacing Bradford Administrative Services, Inc.

The Director of the Division of Medical Services has sent letters to the Governor and the individual New York State Senators and Representatives from the New York City area, as well as key health care associations, and specialty societies and other health care providers, expressing our objections to this move. Support has been received from these organizations and a Coalition of Concerned Medicaid Providers has been formed by the Greater New York Hospital Association. Staff of the Division of Medical Services has attended these meetings and has related the MSSNY position in that this move will cause a disruption of the Medicaid Management Information System. We anticipate an adverse impact on the timeliness and accuracy of payments to physicians on behalf of Medicaid recipients which can result in diminishing further physician participation in the program.

In order to ensure a smooth transition to the Albany-based operations, the NYSDSS has developed a Transition Advisory Board. The Board will meet on a regular basis throughout the transition period and have the following functions:

1. Identify and respond to the concerns of the provider community with respect to the move to Albany and the new contract.
2. Make recommendations to the State in all areas related to the transition and, especially, provider relations.
3. Provide for effective means of on-going communications to the enrolled MMIS providers on transition-related issues.

Staff of the Division of Medical Services has attended these meetings and society members are kept informed of all discussions.

The Greater New York Hospital Association and the Hospital Association of New York State are working on legislation to ensure that there are no payment delays to Medicaid providers, and they have asked for our support.

At its meeting on May 27, 1982, the Council approved support for the resolution seeking provider support for a State-guaranteed, timely Medicaid cash flow during the relocation of the operations of the Medicaid Management Information System.

The resolution reads as follows:

> *Whereas*, The New York State Department of Social Services (NYSDSS) has affirmed its intention to relocate the operations of the Medicaid Management Information System (MMIS) to Albany from New York City despite repeated warnings from the State's Medicaid provider community; and
>
> *Whereas*, The Medicaid provider community shares with the Legislature a concern for the continued accessability of quality medical services to every Medicaid recipient in the State of New York; and
>
> *Whereas*, NYSDSS has affirmed that it intends this move to be a "low risk turnover which is undetectable to providers, recipients, and Department MMIS users," it is essential that the Legislature develop a mechanism to ensure that this commitment is fulfilled; and
>
> *Whereas*, The Medicaid community remains gravely concerned about the real probability of a negative impact on providers and recipients should unforeseen problems develop as a result of this State action which interrupts the timely processing of Medicaid claims and the flow of payments to providers and services to Medicaid clients; and
>
> *Whereas*, It is essential that NYSDSS have at its disposal the resources and procedures to make available to Medicaid providers funds already appropriated pursuant to federal, state, and local laws for Medicaid services the payment of which would hold harmless any Medicaid provider in the State from financial jeopardy which results from this State action; and
>
> *Whereas*, Failure to provide such protection would jeopardize the mutual goodwill and credibility which has been established between NYSDSS, as an agency of the State, and the thousands of Medicaid providers, including hospitals, nursing homes, diagnostic and treatment

centers, physicians, dentists, pharmacists and their employees and vendors who collectively provide quality medical services to nearly three million Medicaid recipients throughout the State of New York; therefore be it

Resolved, That the State of New York establish a mechanism the purpose of which is to:

1. **Minimize the potential disruption of services to Medicaid recipients.**

   A disruption of cash flow to Medicaid providers would tarnish the positive relationship that has been established between MMIS and the provider community.

   Some providers may be forced to withdraw from or limit their participation in the Medicaid program, thereby reducing the access Medicaid recipients have to health care services.

   This mechanism would ensure that every provider can continue to provide high-quality medical care to these individuals.

2. **Protect any Medicaid provider in New York State from an interruption of cash flow associated with the NYSDSS relocation effort.**

   This is accomplished by guaranteeing providers that, during a period of time commencing three months prior to the intended start of MMIS operations in Albany and twelve months subsequent to that date, no provider would receive less than 100 percent of the dollars received in a preestablished base period.

   In addition, NYSDSS would be required to report to the Legislature each month on the progress of the relocation, its impact on recipients and providers and the effectiveness of the mechanism established by legislation.

3. **Minimize the cost of any such mechanism to the State.**

   The Legislature would mandate that the Commissioner of NYSDSS pay to providers the difference between the actual claims processed by MMIS each week during the transition period and "normal" payments as defined above.

   This will be a stand-by system which will only be used to the extent that NYSDSS is unsuccessful in meeting its own objectives and implementation timetable. However, such a mechanism would provide a "fail safe" system to assure that no recipient or Medicaid provider is adversely affected by administrative problems not of their making.

4. **Avoid any needless increase in State Medicaid expenditures which are ultimately paid by the taxpayers.**

   It is longstanding State policy to encourage Medicaid providers to operate efficiently and minimize costs which are passed on to the State for reimbursement purposes. Delays in prompt payment of MMIS claims will compel providers to increase their working capital requirements and incur high interest charges. This will place inordinate cash flow burdens on many providers which will compel some to leave the Medicaid program.

   This system would cushion the effect of the relocation by using all available resources at the State's disposal.

   In summary, Medicaid providers have cautioned NYSDSS regarding the potential harm of the MMIS move. The Legislature is now being asked to develop a mechanism which would give every recipient and Medicaid provider in the State of New York the comfort and assurance that the continued integrity and continuity of Medicaid services will be maintained. Successful execution by NYSDSS will avoid the use of this system. No additional monies will be requested to implement this proposal.

A Task Force has been established at the State level (DSS-MMIS) consisting of representatives from consumer and provider groups to monitor the New York — Albany move. This group has MSSNY membership and all meetings have been attended.

The Chairman of the Commission on Medical Services referred to a recent meeting in Washington, D.C. between Federal officials and MSSNY representatives, wherein;

- the federal representative conveyed the impression that it would prefer State takeover of the Medicaid program with federal funding at a reduced rate under a block grant type concept (each State would use federal funds as necessary, and absorb excess costs required to operate the program).
- the federal representative identified that financial constraints preclude an increase in Medicaid reimbursements.
- it was identified by the MSSNY representatives that reimbursements should not be similar for emergency and non-emergency care in Emergency Room Facilities and that a tremendous savings can be realized by encouraging non-emergency care in physicians' offices.

It should be noted that the Chairman of the Commission on Medical Services of MSSNY, along with the Director, Division of Medical Services has had a number of conversations at the federal level regarding Medicaid.

The Chairman also noted that he is in contact with U.S. Congressman Gerald B. Solomon regarding Medicaid reimbursement, and he will report on these matters at a later date.

The Chairman of the Committee expresses his appreciation to the members of the committee for the time and effort they have devoted to the work of the committee. He also wishes to thank Robert J. O'Connor, M.D., Director of the Division of Medical Services, Mr. Mario V. Menghini, Assistant Director, and Mrs. Jeanette Palucci, Secretary, for their conscientious efforts and diligence.

Respectfully submitted,

Raul Pohorille, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommehds that the report of the Committee on Medicaid be filed for information.

⟹ . . . *The report of the Committee on Medicaid was* **FILED FOR INFORMATION** . . .

MEDICAL CARE INSURANCE

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Medical Care Insurance are as follows:

H. Gregory Thorsell, M.D., *Chairman*	Chautauqua
David M. Benford, M.D.	New York
Elise H. Korman, M.D.	Suffolk
Monte Malach, M.D.	Kings
Raul Pohorille, M.D.	Bronx
Leonard S. Weiss, M.D.	Nassau
*Stephen A. Grabelsky	Queens

The Committee held one formal meeting since the last annual report to the House of Delegates. The following matters were considered:

Community Health Plan of Suffolk (CHPS). It was identified that the Community Health Plan of Suffolk, a free standing, federally subsidized Health Maintenance Organization (HMO), with 22,000 subscribers, found itself in financial difficulty after 2½ years of operation (primarily because its premiums were set too low to cover operating costs). As a result, the Federal Government revoked CHPS's Federal HMO Certification, and the State Insurance Department threatened receivership unless the HMO effectively reorganized itself financially.

At this point, Blue Cross and Blue Shield of Greater New York (BCBSGNY) entered into negotiations with CHPS looking toward the addition of this entity as the corporation's third HMO provider unit. BCBSGNY provided a loan to CHPS of approximately $3.4 million to: settle a federal loan to CHPS (plus accrued interest); permit payment of delinquent premiums owed BCBSGNY; pay various accumulated debts; and infuse working capital into the HMO (the loan would bear interest to Blue Cross and Blue Shield at a ten percent rate with a nine (9) year repayment schedule).

The Suffolk County Medical Society, along with area physicians, is in opposition to BCBSGNY's revitalization of the HMO because it allegedly generates unfair competition. The Medical Society, County of Columbia, has also registered disapproval of this action, bringing this to the attention of the Medical Society of the State of New York (MSSNY).

The ensuing discussion by the Committee on this matter brought out the following points:

- The action by BCBSGNY was based on the decision to expand its HMO activities. At the present time, the Plan operates two (2) other HMOs at Montefiore Hospital and at 410 Lakeville Road, Lake Success. (It is also rumored that BCBSGNY is looking into the possibility of affiliating itself with two (2) other HMOs in the downstate area.)
- According to the Suffolk and Columbia County Medical Societies, physicians are subsidizing BCBSGNY as individual subscribers and, therefore, subsidizing their competition.
- Although the MSSNY does not oppose the HMO concept as an alternative method of health care delivery, the Society does desire that this concept be fair and palatable for all physicians.

The proposed position paper relative to IPA/HMOs developed by the Committee on IPA/HMO was reviewed. The following motion was made, duly seconded, and passed unanimously to:

> Support the principles of the HMO Position Paper being presented to the Council by the Committee on IPA/HMO. (See Report of the Committee on IPA/HMO.)

Medical Insurance/Intoxicated Drivers. Correspondence from Dr. Sheldon Katz, President of the Medical Society of the County of Rockland, Inc., to Dr. Edward Siegel, dated November 23, 1981, citing lack of coverage for medical services to intoxicated drivers involved in automobile accidents, was reviewed. Dr. Katz's position is that:

a) this is a social problem, the cost of which is borne by hospitals and physicians because medical insurance coverage is generally unavailable;
b) No-Fault insurance carriers be mandated through legislation to bear the cost of medical services in these situations.

The committee members maintained that the person who drives while intoxicated should not be denied adequate care because of a social problem any more than a poor person should be deprived of assistance because of poverty. Further, the law as it stands results in physicians and hospitals bearing the economic burden. The following motion was made, duly seconded, and passed unanimously:

> Since adequate medical care may not be available for the alcohol-impaired individual injured in an automobile accident because No-Fault medical insurance does not provide coverage for these patients, or because many of them do not possess other forms of medical insurance, the MSSNY take the necessary steps to seek mandatory inclusion of medical services in the New York State No-Fault Insurance Law for these patients who are injured as a result of a social problem, i.e., intoxication.

The Council, on March 25, 1982, approved this motion. This motion was sent to the State Legislation Committee to attempt to obtain an amendment to Section 672 (2.b) of the New York State Insurance Law to effectuate the intent of the above motion.

Review of New York Life Insurance Company Surgical Reimbursement Policy. Correspondence was received in which reference was made to a New York Life Insurance Company contract which "unfairly exploits the surgeon" through insufficient reimbursement for services rendered, e.g., the contract allows up to $700 for surgery (the physician's actual charge was $2,400), while other medical procedures under the same contract have unlimited coverage. (The surgeon, in this case, provided the primary service and he received less than the anesthesiologist who billed, and received, $745.)

It was pointed out to the Committee that physicians have the option to request from patients details of their medical insurance coverage prior to undertaking treatment — especially since the carrier is obliged to furnish this information to contract holders.

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* Medical Student

The following motion was made, duly seconded, and passed unanimously:

> That the MSSNY send a letter to New York Life Insurance Company recommending that its surgical-medical insurance policies be upgraded, as necessary, commensurate with today's economic realities.

The Council, on March 25, 1982, approved this motion. On April 14, 1982, a letter was sent by the Office of the Executive Vice-President to Jacob B. Underhill, President, New York Life Insurance Company, requesting that the company review its surgical-medical programs for the purpose of upgrading them, commensurate with today's economic realities. Having requested a copy of the particular correspondence which prompted the Committee's motion, Paul M. Peyser, Executive Assistant, New York Life Insurance Company, informed the Office of the Executive Vice-President on April 26, 1982, that this particular policy was issued in 1964. Their current series has a maximum surgical allowance of $2,000, with a new series to provide benefits based on "reasonable and prevailing" charges.

"Reimbursement for Physicians' Cognitive and Procedural Services." This January, 1981, White Paper, published by the American Society of Internal Medicine (ASIM), was placed on the agenda to elicit from the Committee comments relative to a possible MSSNY official position on the issue. The paper, which is also supported by the American Academy of Family Physicians, as well as the American Academy of Pediatrics, asserts that insurers should recognize and place appropriate compensatory value on physicians' cognitive (or "thinking") services, i.e., data gathering, analysis, planning management, decision-making, judgment relating to the prevention, diagnosis, and treatment of health problems, and the communication of such information to patients, etc.

Committee members representing various primary care physicians stated that internists, general practitioners, and family practitioners often spend an hour taking a patient history, giving a physical, and interpreting the findings. These members believe that reimbursement for cognitive services is at the wrong end of the spectrum since coded and less time-consuming procedures are reimbursed at a higher rate. In essence, medical insurance mechanisms do not recognize nor provide physician reimbursement for the important process of "thinking," including surgical consultations.

It was noted by Dr. Malach, President-Elect, ASIM, that the Society is currently engaged in discussions with the national Blue Cross and Blue Shield Association regarding the equity of reimbursement for cognitive and procedural services; pro-competition personnel in Washington, D.C. recognize the importance of this concept.

Following considerable discussion, a motion was made, duly seconded, and passed unanimously:

> That the MSSNY support the concept that all policies for health insurance and medical care insurance include, as a specified benefit, the reimbursement for cognitive services.

It was felt that, if this motion is approved by the Council, a position paper could be developed and presented at a later date. At the present time, the Committee would simply like support of the concept in principle.

The Council, on March 25, 1982, referred the motion back to the Committee on Medical Care Insurance for development of a position paper.

The Chairman expresses his appreciation to the members of the Committee for the time and effort they have devoted to the work of the Committee. He also wishes to thank Robert J. O'Connor, M.D., Director of the Division of Medical Services, Mr. Mario V. Menghini, Assistant Director, and Ms. Joan Reilly, Secretary, for their efforts and diligence.

Respectively submitted,

H. Gregory Thorsell, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Medical Care Insurance be filed for information.

⟹ . . . *The report of the Committee on Medical Care Insurance was* **FILED FOR INFORMATION** . . .

PEER REVIEW

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Peer Review are as follows:

John T. Prior, M.D., *Chairman*	Onondaga
Charles N. Aswad, M.D.	Broome
Clarke T. Case, M.D.	Oneida
James M. Flanagan, M.D.	Wayne
George W. Fugitt, M.D.	Erie
Howard B. Goldstein, M.D.	Rockland
Gerald L. Haines, M.D.	Schenectady
Arthur D. Hengerer, M.D.	Albany
Morton Kurtz, M.D.	Queens
Martin Markowitz, M.D.	Kings
Richard N. Pierson, Jr., M.D.	New York
George B. Pollock, M.D.	Nassau
William A. Schwarz, M.D.	Richmond
Thomas J. Sheehy, Jr., M.D.	Nassau
Daniel A. Sherber, M.D.	Westchester
Stanley I. Fishman, M.D., *Consultant*	Kings

Since the appointment of the Peer Review Committee by the House of Delegates, the Committee on Peer Review held one meeting. The following matters were discussed:

Background information relevant to reasons for the appointment of a new peer review committee, i.e., the action taken by the American Medical Association House of Delegates on June 10, 1981, in passing Resolution 4 — and particularly the referral of the 5th Resolved of this resolution to the Board of Trustees for further study, was presented for discussion. Resolution #4 reads as follows:

> **Resolved,** That the American Medical Association take a leadership role in collaboration with all units of the Federation in developing and promoting effective means of physician assessment of the quality of medical care regardless of the future fate of PSROs; and be it further
>
> **Resolved,** That physicians maintain control and direction over peer review and that peer review be done only by physician-sponsored organizations regardless of the funding source for such review and that the American Medical Association notify all agencies involved in medical peer review of this resolution; and be it further
>
> **Resolved,** That physicians, acting through their state medical associations, provide for protection of the confidentiality of existing data accumulated for PSRO regardless of the future fate of PSRO; and be it further
>
> **Resolved,** That the Council on Medical Service submit a report of progress on the implementation of this resolution at the 1981 Interim Meeting; and be it further
>
> **Resolved,** That, since the Quality Assurance Program for hospitals as devised by the Joint Commission on Accreditation of Hospitals and medical care foundations utilized effectively by many states are proven mechanisms for providing physician peer review, the House of Delegates request the Board of Trustees to investigate expanded use of these methods and assist actively in the formation of medical care foundations, or similar organizations, in states where they do not now exist, if requested by the state society.

It is this last Resolved, which was referred by the American Medical Association House of Delegates to its Board of Trustees for further study, that led to a number of meetings during the summer of 1981, called by Dr. Ralph Schwartz, then President of the Medical Society of the State of New York, for the purpose of discussing how the MSSNY could appropriately participate in the proposal. Resolution 81-10 was developed and submitted to the October meeting of the House of Delegates of MSSNY. The single resolved, approved by the House of Delegates of the MSSNY, called on the Society to establish a new committee of the Council to devise and recommend for implementation the mechanisms necessary to coordinate and assure that peer review for all patients in the State of New York be done by physicians only at the local level.

The Committee was appointed by the President of MSSNY, Dr. Milton Rosenberg, and included the physicians as listed at the beginning of this report.

The Committee discussed the many potentialities embodied in Resolution 81-10 passed by the House of Delegates in October, 1981, and also in the AMA Resolution #4 (recognizing that the fifth resolved of this resolution was referred back to the AMA Board of Trustees). Out of this discussion the following motion was made, duly seconded, and passed unanimously:

> That peer review must be physician controlled and based upon appropriateness, medical necessity, and acceptability of high-quality care. In order to assure that all such peer review remain under physician control in this State, the MSSNY should function in an advisory role in seeing that all presently accepted mechanisms are fully utilized and to study and to assist in developing new mechanisms as may be required — such mechanisms to be based on regional (local) standards and operations and shall encompass all sources of funding as well as all medical care to whomever and wherever provided.

At it's meeting on March 25, 1982, the Council referred this resolution, along with American Medical Association's principals for voluntary medical peer review, which were adopted by the American Medical Association, December, 1981, in lieu of the fifth Resolved of Resolution #4, back to the Committee on Peer Review for further clarification at its next meeting.

In the interim, the American Medical Association has forwarded its June, 1982, update "Implementation of Voluntary Medical Peer Review," which will be reviewed by the MSSNY Peer Review Committee for report to the Council.

New Business: The President of the Medical Society of the State of New York reported that the Executive Secretary of the Ulster County Medical Society, Frederic W. Holcomb, Jr., M.D., had informed the MSSNY that the county society had been served with a subpoena by the Board for Professional Medical Conduct to produce peer review records. The Ulster County Medical Society has engaged an attorney to attempt to quash the subpoena, and is requesting financial assistance from the MSSNY in its legal endeavor.

It was noted that the Education Law provides immunity to peer review committees of county medical societies; however, it is an opinion of the Attorney General of the State of New York that the immunity relates solely to civil proceedings.

The President of the Medical Society of the State of New York asked that the Ulster County Medical Society keep the MSSNY advised of further developments.

The Council voted to endorse in principle the recommendation that the MSSNY assist the Ulster County Medical Society in its attempt to quash a subpoena from the Board for Professional Medical Conduct, pending receipt of detailed information and a fiscal note on the potential costs.

The activities of this committee will greatly expand. Various American Medical Association papers are being distributed to committee members and will form the basis for detailed discussions in subsequent meetings.

The Chairman expresses his appreciation to the members of the Committee for the time and effort they have devoted to the work of the Committee. He also wishes to thank Robert J. O'Connor, M.D., Director of the Division of Medical Services, Mr. Mario V. Menghini, Assistant Director, and Mrs. Norma Miller, Secretary, for their conscientious efforts and diligence.

Respectfully submitted,
John T. Prior, M.D., *Chairman*

■

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Peer Review be filed for information.

⟹ . . . *The report of the Committee on Peer Review was* **FILED FOR INFORMATION** . . .

PROFESSIONAL STANDARDS REVIEW ORGANIZATIONS

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Professional Standards Review Organizations are as follows:

Stanley I. Fishman, M.D., *Chairman*	Kings
Arthur D. Hengerer, M.D., *Vice-Chairman*	Albany
John P. Albanese, M.D.	Bronx
Irwin J. Cohen, M.D.	New York
John E. Glennon, M.D.	Washington
Neville W. Harper, M.D.	Oneida
Franklyn C. Hayford, M.D.	Schenectady
Morton Kurtz, M.D.	Queens
John T. Prior, M.D.	Onondaga
William A. Schwarz, M.D.	Richmond
Thomas J. Sheehy, Jr., M.D.	Nassau
Daniel A. Sherber, M.D.	Westchester
Herbert L. Sperling, M.D.	Rockland
*Mark S. Dresner	Bronx

Since its last report to the House of Delegates, the Committee on Professional Standards Review Organizations held one meeting. The following matters were discussed:

Discussion of PSRO Medicaid New York State Contracts. The Committee discussed the State/PSRO Medicaid contracts which evolved after intensive modification efforts by the PSROs. The PSROs endeavored to maintain the concepts embodied in the original state drafts while making revisions which were ultimately accepted by the New York State Department of Health (NYSDH).

The PSROs will sign their agreements with the State, while the New York Statewide Professional Review Council pursues clarification of certain vague areas related to the agreements.

The PSRO Executive Directors present at the meeting expressed general gratification with the results of successful negotiations with the NYSDH, in spite of some questionable contractual provisions. In view of this, the Chairman cautioned that the PSROs maintain a flexible posture with the State since past experience has demonstrated that apparent rigid State positions are often negotiable.

Discussion of the letter sent to the Committee by John T. Prior, M.D., written by Terrence E. Dwyer, Executive Director of the PSRO of Central New York. The PSRO of Central New York's paper on private review was discussed, and lauded for its views and informational content.

During the discussion the following side issues were cited:

- The Cost effectiveness of PSRO review as opposed to other competitive review mechanisms must be demonstrated to private business.
- With the upcoming election of a new State Governor and an anticipated changed slate of State officials, PSROs should be prepared to cultivate relationships with appropriate key individuals.
- A legislative or regulatory mandate should be sought on behalf of private review by PSROs.
- A close study and monitoring of the Durenberger Bill should be conducted, and discussed at the next PSRO Committee meeting.

Discussion of the Committee's Future Goals. Following a lengthy discussion it was agreed that the Committee be maintained in conjunction with PSRO activities and for exchange of views with the MSSNY Peer Review Committee. It was identified that this latter committee was originally formed (per MSSNY Resolution 81-10) to develop a peer review mechanism in the event of PSRO demise, provide guidance and assistance to PSROs in the event they remained in operation, as well as to assist any other peer review mechanisms, and ensure physician control of peer review mechanisms.

The following motion was made, duly seconded, and passed unanimously:

> Move, that the MSSNY Council approve and support PSRO contract negotiations with the State for Medicaid Review, and that the MSSNY disseminate Statewide the Council's approval.

The above motion was passed by the Council with one negative vote.

Proposed Role of Component County Medical Societies Concerning Peer Review. A role of component county medical societies in the peer review process resulted in the following resolution being made, duly seconded, and passed unanimously:

> *Whereas*, Local county medical societies represent the best opportunity for broad-based review activities by practicing physicians, thereby furthering the optimal provision of quality medical care for all patients; and
>
> *Whereas*, The MSSNY is anxious to assist, promote, and coordinate such peer review activities; therefore be it
>
> **Resolved,** That the MSSNY urge all component societies to work actively either within, or at least in close coordination with, effective existing physician controlled review organizations which show due concern for the patient as well as the physician; and be it further
>
> **Resolved,** That the MSSNY urge its component societies to move immediately to fill the void left by review organizations no longer operating; and be it further
>
> **Resolved,** That ongoing reports of such activities by local county medical societies be reported by MSSNY on a periodic basis (annually).

This was passed by the Council at the March 25, 1982, meeting.

The staff of the Division of Medical Services attended and participated in a number of meetings involving the New York Statewide Professional Standards Review Council, Inc. Other matters concerning PSRO activities were dealt with on an almost daily basis, with frequent communications with the Committee Chairman.

The Chairman expresses his appreciation to the members of the Committee for the time and effort they have devoted to the work of the committee. He also wishes to thank Robert J. O'Connor, M.D., Director of the Division of Medical Services, Mr. Mario V. Menghini, Assistant Director, and Mrs. Norma Miller, Secretary, for their conscientious efforts and diligence.

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* Medical Student

Respectfully submitted,

Stanley I. Fishman, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Professional Standards Review Organizations be filed for information.

⟹ . . . *The report of the Committee on Professional Standards Review Organizations was* **FILED FOR INFORMATION** . . .

WORKERS' COMPENSATION AND OCCUPATIONAL HEALTH (ANNUAL)

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Workers' Compensation and Occupational Health are as follows:

John H. Morton, M.D., *Chairman*	Monroe
Burton P. Hoffman, M.D., *Vice-Chairman*	Westchester
George W. Calvosa, M.D.	Kings
Robert A. Caputi, M.D.	Erie
Denis Chagnon, M.D.	Albany
Thomas J. Doyle, M.D.	Queens
Frederic W. Holcomb, Jr., M.D.	Ulster
James E. Holmblad, M.D.	Schenectady
Max N. Howard, M.D.	New York
Robert Katz, M.D.	New York
Paul C. Lehmuller, M.D.	Nassau
Joyce M. McChesney, M.D.	Monroe
Alexander E. Messer, M.D.	Otsego
Bernard S. Post, M.D.	Kings
Nicholas P. Teresi, M.D.	Albany
*Theresa M. Maresca	Bronx

Since its last report to the House of Delegates, the Workers' Compensation and Occupational Health Committee met on three occasions, and the following matters were discussed:

Microdissection-Microsurgery Techniques. It was brought to the attention of the Committee that numerous letters had been received relative to reimbursement policy for those procedures that involved the use of magnifying devices, i.e., microscopes and loupes. The Committee recognizes the necessity and value of such magnifying equipment for the successful performance of certain procedures but feels that reimbursement should be made for *performance* of a procedure and not for the type of equipment used.

The following motion was made, seconded, and passed unanimously:

> That the line item (64700) used in reporting a microdissection technique, in addition to the procedure, be removed as a specific notation and that the unit value for each procedure be appropriately adjusted to reflect the use of a microdissection technique where this type of instrumentation is necessary for the successful performance of a given procedure.

This same topic was discussed by the Interspecialty Committee and an Ad Hoc Subcommittee was appointed to study the problem. This ad hoc committee presented the following motion:

> That line item 64700 of the 1973 Workers' Compensation Medical Fee Schedule be left unchanged since it refers only to that section involving nerve repair and since microdissection techniques include optical magnification through various recognized modalities (loupes vs. microscope), reimbursement for use of such devices should be based upon a detailed operative report.

Both of the above motions were discussed at the Council meeting on May 27, 1982, and the Council voted to approve the recommendation of the Workers' Compensation and Occupational Health Committee. This has been transmitted to the Chairman via the Advisory Committee on the Medical Fee Schedule and Allied Problems.

Denial of Interim 6% Workers' Compensation Increase for No-Fault Cases. Effective February 15, 1982, the Chairman of the Workers' Compensation Board promulgated a 6% across the board increase in Workers' Compensation fees reflecting the malpractice premium increase allowed by the Superintendent of Insurance. It was noted that the Superintendent of Insurance refused to apply this increase to No-Fault claims. In view of this action the Committee passed the following motion for Council action:

> In view of the precedent that would be established by the recent decision of the Superintendent of Insurance, and to prevent this from occurring in the future, the Medical Society of the State of New York should immediately seek to obtain a restraining order which would require the Superintendent of Insurance to accept the recent interim change in the Workers' Compensation Fee Schedule.

At the Council meeting on March 25, 1982, it was pointed out that only a four and one-half-month time frame existed before the July 1, 1982, promulgation of new rates by the Chairman of the Workers' Compensation Board, and that assurances had been received that at that time the No-Fault schedule would be once again integrated with that of Workers' Compensation. With this information in hand, the Council tabled the above motion to the September, 1982, meeting for consideration if the Superintendent sees fit not to integrate the schedule. It was also felt by the Council that delicate negotiations were in progress relative to the malpractice situation and that any legal action at that point in time would be counterproductive.

At the time of writing this report, Mr. William Kroeger, Chairman of the Workers' Compensation Board, has promulgated a new Workers' Compensation Fee Schedule to be effective July 1, 1982. It is noted that the No-Fault fees are once again the same as the Workers' Compensation fees.

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* Medical Student

Double Authorization When a Physician is Boarded in Two or More Specialties. The Committee feels that a physician who is certified in more than one specialty should be so recognized by the Workers' Compensation Board. The following motion was made, seconded, and passed unanimously:

> Any physician who is Board Certified in more than one specialty should be assigned the proper (multiple) code letters reflecting his qualifications in more than one area.

This motion was approved by the Council at its March 25, 1982, meeting, and transmitted to the Advisory Committee for presentation to the Chairman.

New York County Medical Society Recommendation Regarding Problem of Unnecessary Delays That Physicians Encounter When Called for at Hearings. The Workers' Compensation Committee of the New York County Medical Society, at its meeting on December 14, 1981, unanimously approved the following recommendation:

> That the Board of Directors recommend to the Medical Society of the State of New York that the State Society's representative on the Workers' Compensation Board Chairman's Advisory Committee on the Medical Fee Schedule and Allied Problems request the Chairman, Mr. William Kroeger, to look into the problem of unnecessary delays that physicians encounter when called for hearings at the Workers' Compensation Board.

At its meeting on January 14, 1982, the Council approved the above recommendation, and that it be brought to the attention of the Advisory Committee on the Medical Fee Schedule and Allied Problems of the Workers' Compensation Board.

This has been done by the Division Director. It has been further discussed by him with New York County, with the request of that county, that specific documentation be provided for instances in which delays occur, giving dates, times, etc.

Revising the Profile of Prevailing Fees. The First District Branch has requested the Medical Society of the State of New York to communicate with insurance carriers regarding the prevailing fees and their relationship to malpractice premiums.

The motion that "MSSNY ask insurance carriers to reconsider and revise profiles of prevailing fees to reflect the increases in medical liability insurance premiums" was approved by the Council, at its meeting on March 25, 1982.

Such letters have been sent but, as yet, no meaningful replies have been received. This will be followed up through various channels.

"Furlong" Case. In a ruling on June 4, the Supreme Court, New York County, dismissed a proceeding brought by Monica W. Furlong, M.D., seeking to enjoin the Chairman of the Workers' Compensation Board (WCB) from taking punitive action against her for charging usual and customary fees in excess of the fee schedule in Workers' Compensation cases.

In dismissing the case as moot, Justice Alvin F. Klein noted that the present WCB Chairman, William Kroeger, had made a sworn statement indicating that he has no intention of taking punitive action against Dr. Furlong for her billing practices.

The case arose with regard to the petitioner's fees for medical services rendered in Workers' Compensation cases, which were excessive in the opinion of the late Arthur Cooperman, Chairman of the Workers' Compensation Board at the time. Dr. Furlong alleged that Mr. Cooperman made threats to revoke her WCB authorization if she continued to bill in excess of the Workers' Compensation Fee Schedule. Mr. Cooperman died before resolution of the litigation. On June 30, 1981, Justice Arthur Blyn of the Supreme Court, New York County, granted a preliminary injunction in petitioner's favor against the Chairman of the Workers' Compensation Board, without reference to a named individual.

MSSNY sought leave for permission to appear as amicus curiae in order to argue the legal principle that the Chairman of the WCB does not have the authority to remove a physician's WCB authorization for billing usual and customary fees, even if such fees are in excess of the medical fee schedules.

Because of the important implications of the case, MSSNY published (*News of New York*, November 15, 1981) a statement to help physicians decide on their course of action with regard to charging usual and customary fees in WCB cases. The Society's Council reaffirmed this position at its meeting on June 23:

"1) Any authorized individual physician acting on his own volition and treating a Workers' Compensation patient can submit a bill based upon his usual and customary fee. Nothing in the Workers' Compensation Law prevents this.

"2) The physician can bill for a greater amount than specified in the fee schedule by making prior arrangements with the employer/carrier.

"3) If the fee in (1) above is not controverted by the insurance carrier within 30 days from date of submission that fee is deemed fair and payable in full.

"4) If controverted within 30 days the physician can submit the A-1 form requesting an arbitration procedure. NOTE: The carrier can controvert the entire bill and not only just that part over and above the fee schedule allowance.

"Keeping the above four points in mind it becomes obvious that the physician has several individual choices of:

"1. Billing usual and customary fees and knowing that these will probably be controverted with increasing frequency and resulting in increasing delays in arbitration procedures — the end result being a potential breakdown in cash flow.

"2. Prearranging the fee with the employer — particularly in unusually difficult situations.

"3. Billing according to the fee schedule until such time as the courts define the minimum vs. maximum status of the Workers' Compensation Law.

> "The most important consideration is simply that whatever course of action is taken it must be taken by an *individual acting as an individual.* There must be no evidence of collusion, concerted action or attempts by any group to 'Break the System'."

The Chairman of the Committee expresses his appreciation to the members of the Committee for the time and effort they have devoted to the work of the Committee. He also wishes to thank Robert J. O'Connor, M.D., Director of the Division of Medical Services, Mr. Mario V. Menghini, Assistant Director, and Mrs. Jeanette Palucci, Secretary, for their conscientious efforts and diligence.

Respectfully submitted,
John H. Morton, M.D., *Chairman*

WORKERS' COMPENSATION AND OCCUPATIONAL HEALTH (SUPPLEMENTARY)

To the House of Delegates, Ladies and Gentlemen:

Since the preparation of our Annual Report the following topics were discussed at a meeting held on June 4, 1982:

Reimbursement for Questionable Work Related Problems. The question arose as to payment in those situations where compensability is in doubt and where the primary treating physician refers the patient to a consultant for determination as to the actual cause of certain symptoms, i.e., a worker complains of symptoms which are diagnosed as tendonitis — as such, potentially compensable. This patient is then referred to another physician to determine if the symptoms are truly causally related to work problems or are they symptoms of an underlying systemic arthritis. Should the physician rendering the consultation be reimbursed regardless of compensability by the workers' compensation carriers?

The Committee, in considering this problem noted that it had been discussed previously and voted to affirm the policy that continuing care of a compensable injury or illness should be reimbursed accordingly, but also noted that under the present law reimbursement for non-causally related problems could not be paid for by the compensation carriers even though considerable effort had been expended prior to determination of compensability.

The Committee voted unanimously to affirm this policy.

The above was received for information by the Council at its meeting on September, 1982.

MR-54 Procedure. The MR-54 procedure (Request of Payment) promulgated by Mr. Arthur Cooperman, former Chairman of the Workers' Compensation Board, is apparently not working effectively. There is a large backlog of requests which are not being processed. Additionally, even where processed and awards were ordered to be paid, the carriers are ignoring the order of the Administrative Law Judge and not paying the physicians. The following recommendation was made, seconded, and passed unanimously by the Committee:

> That the Chairman of the Workers' Compensation Board be notified that the MR-54 system is apparently not accomplishing its intent and that carriers are not complying with the order to pay their bills after an award had been made. Penalties should be assessed against the carriers for failure to comply with promulgated regulations.

The Committee was informed that the Division Director is aware of this problem and is in active discussion with the Chairman in an attempt to resolve the problem. The Division Director requested that no further action be taken at this time pending outcome of discussions.

The above was received for information by the Council at its meeting in September, 1982.

Treatment of WC Claimants by Non-Authorized Physicians. With regard to the treatment of Workers' Compensation claimants by non-authorized physicians, a recurrent problem is noted which needs specific interpretation of the Workers' Compensation Law and specific regulations for guidance of physicians and carriers. The text of the Workers' Compensation Law was reviewed and considered in context with the legal, ethical, and professional obligation of all physicians.

The following motion was made, seconded, and passed unanimously by the committee:

> That all non-authorized physicians treating Workers' Compensation claimants as *a true emergency*, and in keeping with their professional, ethical, and legal obligations, be permitted to continue treatment of such claimants for the duration of that problem (after care period), unless the patient-physician relationship is properly terminated by either party or by common agreement. Reimbursement to the non-authorized physician for such services should be according to the fee schedule.

This recommendation will be transmitted to the Chairman of the Workers' Compensation Board for his consideration.

The Council, at its meeting on September 9, 1982, voted to approve the recommendation of the Committee.

Report of the Activities of the Special Committee of the Workers' Compensation Board. A preliminary report of the activities of the Special Committee of the Workers' Compensation Board charged with updating and revising the Workers' Compensation Medical Fee Schedule was presented to the Committee. Also presented were the suggestions of the Rating Board's Medical and Claims Committee relative to proposed office visit breakdowns into various categories. Since these reports are very preliminary and still only in the discussion phase, this Committee voiced several concerns for consideration. Among these were:

1. There will be a great need for professionally qualified people to review and define procedures so that a clerk in a carrier's office would not need the assistance of a physician to explain each procedure and its assignment to a code number.
2. There should be a trial study conducted to determine the effectiveness of such a new schedule before Statewide implementation occurs.
3. The desirability of combining the C48 and C4 forms, thus cutting down on paper work.
4. The issue of obtaining needed prior authorization and

the difficulty of obtaining such authorization particularly in the evening and when insurance companies are closed.

The concerns will be expressed to the Advisory Committee and Special Committee for their consideration.

The above was received for information by the Council at its meeting on September 9, 1982.

Arthroscopy-Meniscectomy Billing. The following motion was recommended by the Committee for consideration by the Council.

That billing for arthroscopy-meniscectomy procedures be according to the following scheme:

Arthroscopy (Single procedure)	— Bill for Arthroscopy
Arthroscopy + Meniscectomy	— Bill for Meniscectomy
Meniscectomy (Single procedure)	— Bill for Meniscectomy

This will be transmitted to the Chairman after consideration by the Council.

The Council, at its meeting on September 9, 1982, approved the recommendation with one vote in opposition.

Move of the Workers' Compensation Board to Jamaica. Efforts are being made to move all functions of the Workers' Compensation Board from the World Trade Center to an area in Jamaica (near Sutphin Boulevard and Jamaica Avenue). There is considerable opposition to this contemplated move, and at the time of this writing, no definitive decision has been reached.

The above was received for information by the Council at its meeting on September 9, 1982.

Respectully submitted,

John H. Morton, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that the annual and supplementary reports of the Committee on Workers' Compensation and Occupational Health be filed for information.

⟹ . . . *The annual and supplementary reports of the Committee on Workers' Compensation and Occupational Health were* **FILED FOR INFORMATION** . . .

Resolution 82-61, Competition in the Practice of the Profession of Medicine by Hospital Corporations and other Non-Physician* Corporations

Introduced by Section on Internal Medicine

Resolved, That the Medical Society of the State of New York deplore the professional practice of medicine by non-physicians; also that the Medical Society of the State of New York deplore the professional practice of medicine by non-physician* corporations; and be it further

Resolved, That the MSSNY and other concerned organizations of physicians, question and challenge, where appropriate, the legality of hospital corporations and other corporations of non-physicians to practice the profession of medicine in the State of New York, to the end of discouraging inappropriate non-physician corporate professional medical practice in the best interests of the public.

■

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

Your reference committee agrees in principle with this resolution, but recommends referral to the Council for further clarification of the legal issues inherent in the resolves.

⟹ Your reference committee recommends that Resolution 82-61 be referred to the Council.

⟹ . . . *The House voted to* **REFER** *Resolution 82-61 to the Council* . . .

Resolution 82-22, Remuneration for Hospital Staff Duties

Introduced by Medical Society of the County of Niagara, Inc.

Whereas, Every hospital has staff positions which are required to be filled by physicians as well as committees on which staff physicians are required to serve; and

Whereas, Many of these committees and positions are mandated by New York State law and/or regulation, by hospital accreditation associations and/or by other government agents; and

Whereas, Work in these positions and on these committees often requires the expenditure of large amounts of time away from the physicians' private practice; and

Whereas, Such activity also subjects physicians to medical-legal entanglements and charges along with all the inherent further demands on their time and resources; and

Whereas, Such committees and staff functions are all inherent in the day-to-day operation of the hospital; therefore be it

Resolved, That the Medical Society of the State of New York recommend that there be a remuneration at a reasonable rate paid by the hospital to the physicians for services rendered while serving in mandated positions. This remuneration is to be based on importance of the position, amount of time required, and such other factors deemed important by the MSSNY.

PAST HOUSE ACTION: Resolution 80-24

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⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

Your reference committee felt that it is part of the physician's obligation to participate in hospital management, and therefore recommends that Resolution 82-22 not be adopted.

⟹ Your reference committee recommends that Resolution

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*"Physician" is defined as a medical doctor licensed by the State of New York.

82-22 not be adopted.

⟹ . . . *The House voted to* **NOT ADOPT** *Resolution 82-22 . . .*

Resolution 82-23, Requirement of Hospitals to Inform Medical Staffs of Their Hospital Medical Liability and Liability Insurance Limits

Introduced by Medical Society of the County of Niagara, Inc.

Whereas, Physicians are required, as a prerequisite for medical hospital staff privileges, to divulge to hospitals the amount of their professional medical liability coverage; and

Whereas, There might arise an occasion whereby a physician is named in a suit solely as a result of a hospital not having sufficient amounts of hospital liability insurance; therefore be it

Resolved, That the Medical Society of the State of New York take the position that all hospitals in New York State be required to notify their medical staff members and particularly those physicians serving in mandated positions, in writing as to the specific amounts of medical liability insurance they carry.

PAST HOUSE ACTION: Resolutions 78-60, 80-3 as amended by the Council

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⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

The committee amended Resolution 82-23 to read as follows:

Resolved, That the Medical Society of the State of New York take the position that all hospitals in New York State be required to make available upon request to their medical staff members and particularly those physicians serving in mandated positions, in writing, as to the specific amounts of medical and general liability insurance they carry.

⟹ Your reference committee recommends that Resolution 82-23 be adopted as amended.

⟹. . . *The House, after discussion, voted to* **REFER** *Resolution 82-23 and the amended resolution to the Council . . .*

Resolution 82-77, Contemplated Definition of Hospital Medical Staff by the JCAH

Introduced by George T. C. Way, M.D., as an Individual

Whereas, The Joint Commission on Accreditation of Hospitals is currently rewriting the Accreditation Manual for Hospitals in an effort to make it less rigid; and

Whereas, The Advisory Committee on the Accreditation Program of Hospitals completely rejected the recommendation of the JCAH staff as it would apply to the section on the hospital medical staff; and

Whereas, The Board of Trustees of the AMA in September, 1982, approved a concept and submitted it to the JCAH which reads as follows:

> GOAL 1 – there is an organized staff with overall responsibility for the quality of the professional services provided. Organized staff membership and specific medical privileges are initially granted, and periodically reviewed, through a mechanism designed to assure that each staff member is qualified to provide services within the scope of clinical privileges granted.
>
> REQUIRED CHARACTERISTICS
>
> 1. There is organized staff consisting of individuals who are professionally qualified for clinical privileges and who are fully licensed to provide medical or related services independently. These individuals are appointed in accordance with required characteristics 2A and 2B. The following requirements are observed:
>
>   A. An organized staff has an active medical component with physician members provide, or are responsible for the supervision, of the preponderance of practice within the hospital.

and

Whereas, The current recommendations under consideration would create an overall professional staff to which the medical component would be subservient; and

Whereas, The American College of Surgeons has completely rejected the action of the AMA and the JCAH as it would apply to the above recommendation; therefore be it

Resolved, That the Medical Society of the State of New York recommend that the definition of the medical staff as it now exists be continued in the new *JCAH Accreditation Manual for Hospitals;* and be it further

Resolved, That the MSSNY delegation to the AMA be instructed to introduce a similar resolution at the Interim Meeting of the AMA House of Delegates in December, 1982.

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⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

Resolution 82-77 was not placed on the Consent Calendar as William Y. Rial, M.D., President of the American Medical Association, requested to speak to this resolution (See Page 430).

⟹ Your reference committee recommends that Resolution 82-77 be adopted.

⟹ . . . *The House, after discussion, voted to* **ADOPT** *Resolution 82-77 . . .*

Resolution 82-78, Copy of Hospital Bill to be Sent to the Physician

Introduced by George Lim, M.D., as an Individual

Whereas, The escalating cost of medical care is considered one of the nation's most pressing problems; and

Whereas, It is appropriate for all patients and members of the medical profession to be well informed of the costs incurred by their patients during their hospital stay; and

Whereas, Many hospitals in this State do not routinely send a copy of the patient's bill to his attending physician at the conclusion of such patient's hospital stay; therefore be it

Resolved, That the Medical Society of the State of New York recommend that each hospital routinely provide an itemized copy of the patient's bill to the attending physician and to the patient, when such bill is prepared or sent out, whether or not third-party billing is involved.

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⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

Inasmuch as implementation of this resolution requires involvement of the Hospital Association of New York State, your reference committee recommends that Resolution 82-78 be referred to Council for further consideration and appropriate action.

⟹ Your reference committee recommends that Resolution 82-78 be referred to the Council.

⟹ . . . *The House voted to* **REFER** *Resolution 82-78 to the Council* . . .

Resolution 82-54, Proportional Representation on the Interspecialty Committee

Introduced by Section on Internal Medicine

Whereas, Each specialty society represented on the Interspecialty Committee of the Medical Society of the State of New York has one vote in committee actions and deliberations; and

Whereas, Some of the specialty societies represented on the Interspecialty Committee have large memberships and others have small memberships; and

Whereas, Small specialty societies can unduly influence the actions of the Interspecialty Committee; therefore be it

Resolved, That voting seats on the Interspecialty Committee of the Medical Society of the State of New York shall be apportioned on the basis of total membership of the specialty society represented on the Committee, to better achieve the goal of "one man, one vote."

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⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

Your reference committee felt that representation on the Interspecialty Committee was based on the principle of a Senate as opposed to a House of Representatives and therefore recommends that Resolution 82-54 not be adopted.

⟹ Your reference committee recommends that Resolution 82-54 not be adopted.

⟹ . . . *The House, after discussion, voted to* **NOT ADOPT** *Resolution 82-54* . . .

Resolution 82-55, Medicaid Inequity in Office or Clinic Setting

Introduced by Section on Internal Medicine

Whereas, Medicaid and some other third party payors allow only a small fee for patient visits to the offices of private physicians; and

Whereas, The same plans compensate generously for similar patient visits made in a clinic setting; and

Whereas, The effect of this is to force patients covered by these plans from the private physicians' offices into clinics which may result in greater costs to the public and poorer medical care to the patient; therefore be it

Resolved, That the Medical Society of the State of New York take appropriate action to achieve a more equitable relationship between the fees paid private physicians and clinics by Medicaid and other third party payors.

■

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

Your reference committee has considered Resolution 82-55 and wishes to present the following substitute resolution:

Whereas, Medicaid and some other third party payors allow only a small fee for patient visits to the offices of private physicians; and

Whereas, The same plans compensate generously for similar patient visits made in a clinic setting; and

Whereas, The effect of this is to force patients covered by these plans from the private physicians' offices into clinics which may result in greater costs to the public and discontinuous medical care to the patient; therefore be it

Resolved, That the Medical Society of the State of New York take appropriate action to achieve a more equitable relationship between the fees paid private physicians and clinics by Medicaid and other third party payors.

⟹ Your reference committee recommends adoption of the substitute resolution for Resolution 82-55.

⟹ . . . *The House voted to* **ADOPT** *the substitute resolution for Resolution 82-55* . . .

Resolution 82-9, Insurance Coverage for Psychiatric Services

Introduced by Medical Society of the County of Westchester, Inc.

Whereas, Blue Shield of Western New York will eliminate payment for treatment of psychiatric illnesses from community contracts, effective 12/31/82, and will only provide such coverage on a rider basis for groups and existing direct-pay subscribers; and

Whereas, This can only be looked upon as a retrogressive step and in conflict with established AMA policy that equivalent reimbursement benefits shall be provided for the mentally ill in all insurance contracts; therefore be it

Resolved, That the Medical Society of the State of New York express its grave concern and admonish all insurance carriers that elimination or curtailment of coverage for psychiatric disorders is not acceptable and will be vigorously opposed by our association.

◆

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

Your reference committee has considered Resolution 82-9 and wishes to present the following substitute resolution:

Whereas, Third party payors are eliminating payment for treatment of psychiatric illness under basic contracts, and will only provide such coverage on a rider basis; and

Whereas, This can only be looked upon as a retrogressive step and in conflict with established AMA policy that equivalent reimbursement benefits shall be provided for the mentally ill in all insurance contracts; therefore be it

Resolved, That the Medical Society of the State of New York express its grave concern and admonish all insurance carriers that elimination or curtailment of coverage for psychiatric disorders is not acceptable and will be vigorously opposed by our association.

⟹ Your reference committee recommends adoption of the substitute resolution for Resolution 82-9.

⟹ . . . *The House voted to* **ADOPT** *the substitute resolution for Resolution 82-9 . . .*

Resolution 82-26, Universal Code for Reporting Medical Services and Procedures Performed by New York State Physicians

Introduced by Medical Society of the County of Niagara, Inc.

Whereas, Numerous procedural coding systems are being accepted and utilized by physicians and third party payors; and

Whereas, The existence and utilization of numerous procedural coding systems leads to miscoding and is not cost-effective; and

Whereas, The use of several coding systems is not conducive to ensure the integrity of all charge—and procedural data collected by the various third party payors; and

Whereas, A recent study by the Health Care Financing Administration (HCFA), "Program Validation Review Study of Physician Coding Problems in Upstate New York," indicates that the use of various coding systems has caused miscoding; and

Whereas, The Division of Quality Control, Region II, New York, Department of HCFA has recommended that Region II's Division of Program Operations should work with the contractor to re-evaluate its current policy on coding with a view toward reconciling the various coding systems in use by upstate physicians; therefore be it

Resolved, That the Medical Society of the State of New York adopt and recommend to its members "The Physicians' Current Procedural Terminology" (CPT-4), published by the AMA; and be it further

Resolved, That the MSSNY initiate appropriate actions necessary to require all private and governmental third party payors, carriers, and/or contractors doing business in New York State to adopt the CPT-4 as the only and universally accepted procedural coding system as of December 31, 1983.

◆

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

The reference committee amended Resolution 82-26 to read as follows:

Resolved, That the Medical Society of the State of New York adopt and recommend to its members "The Physicians' Current Procedural Terminology" (CPT-4), as currently revised and published by the AMA; and be it further

Resolved, That the MSSNY initiate appropriate actions necessary to require all private and governmental third party payors, carriers, and/or contractors doing business in New York State to adopt the CPT-4 as currently revised as the only and universally accepted procedural coding system as of December 31, 1983.

⟹ Your reference committee recommends that Resolution 82-26 be adopted as amended.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-26 as* **AMENDED . . .**

Resolution 82-65, Fixing of Fees by Blue Shield

Introduced by Medical Society of the County of Niagara, Inc.

Whereas, Blue Shield has included a "hold harmless" clause in several of their contracts administered in New York State; and

Whereas, Such provision offers free legal aid to participants in the event they are charged more than the basic Blue Shield payment by non-participating physicians; and

Whereas, Blue Shield advises the patient to make no further payment over the basic Blue Shield fee to the non-participating physicians even though previously agreed to by the patient; and

Whereas, Such actions result in an unwarranted intrusion of Blue Shield into the physician-patient relationships of non-participating physicians; and

Whereas, This practice represents an attempt by Blue Shield to regulate the establishment of customary fees by all physicians; therefore be it

Resolved, That the Medical Society of the State of New York investigate the means to restrict the practice of fixing fees by Blue Shield, including initiating and completing necessary court action on behalf of all physicians of MSSNY.

◆

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

Your reference committee considered Resolution 82-65 and wishes to present the following substitute resolution:

SUBJECT: **Fixing of Fees by Third Party Carriers**

Whereas, Third party carriers have included a "hold harmless" clause in several of their contracts administered in New York State; and

Whereas, Such provision offers free legal aid to participants in the event they are charged more than the basic payment by non-participating physicians; and

Whereas, Third party carriers advise the patient to make no further payment over the basic fee to the non-participating physicians even though previously agreed to by the patient; and

Whereas, Such actions result in an unwarranted intrusion of the carrier into the physician-patient relationships of non-participating physicians; and

Whereas, This practice represents an attempt of the carrier to regulate the establishment of fees by all physicians; therefore be it

Resolved, That the Medical Society of the State of New York express its disapproval of the fixing of fees by third party payers; and be it further

Resolved, That a suitable resolution be transmitted to the AMA requesting that appropriate measures be taken to curtail this activity.

⟹ Your reference committee recommends adoption of the substitute resolution for Resolution 82-65 . . .

⟹ . . . *The House, after considerable discussion, voted to* **REFER** *Resolution 82-65 and the proposed substitute resolution to the Council* . . .

Resolution 82-12, Usual, Customary, and Reasonable Fees in Workers' Compensation

Introduced by Medical Society of the County of Erie, Inc.

Whereas, Section 13(a) of the Workers' Compensation Law of New York State reads in part, "The Chairman shall request the President of the MSSNY to submit to him a report on the amount of remuneration deemed by such Society to be fair and adequate for the types of medical care that is to be rendered under this chapter"; and

Whereas, It is the current mandate of the House of Delegates through substitute Resolution 81-46, that the Medical Society of the State of New York disapprove fixed fee schedules and seek the adoption of payments based on usual, customary, and prevailing fees in all negotiations related to fees where such negotiations are mandated by governmental agencies; therefore be it

Resolved, That the Medical Society of the State of New York continue its efforts to see that all fees are based on a usual, customary, and reasonable basis and that the Medical Society of the State of New York continue to cooperate in trying to establish a relativity scale to be used in paying usual and customary fees.

PAST HOUSE ACTION: Substitute Resolution for
Resolutions 78-32
and 78-39
Amended Resolution 79-23
Substitute Resolution in lieu of
Resolutions 80-19 and 80-45

■

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

The reference committee's decision was based on previous House action (substitute resolution for Resolution 80-19 and 80-45), which read as follows:

> **Resolved,** That the Medical Society of the State of New York disapprove fixed fee schedules and seek the adoption of payments based on usual, customary, and prevailing fees in all negotiations relating to fees where such negotiations are mandated by governmental agencies.

⟹ Your reference committee recommends that Resolution 82-12 not be adopted.

⟹ . . . *The House, after considerable discussion, voted to* **NOT ADOPT** *Resolution 82-12* . . .

Resolution 82-64, Regionalization of Workers' Compensation Fees

Introduced by Eighth District Branch

Whereas, The Workers' Compensation Board promulgated a regionalized fee schedule for the payment of physicians' services; and

Whereas, The fee schedule varies among regions based on zip codes and is predicated on the theory that the costs of conducting a medical practice vary accordingly; and

Whereas, The rural areas of New York State where the fees are lowest are the very same areas where additional physicians' services are most needed; and

Whereas, The effect of regionalizing the fee schedule amounts to discrimination and strikes at the concept of equal pay for equal service; and

Whereas, The New York State income tax schedules are based on uniform criteria and not on geographic areas; therefore be it

Resolved, That the Medical Society of the State of New York bring the discriminatory and arbitrary regionalization of Workers' Compensation fees to the attention of the members of the New York State Legislature; and be it further

Resolved, That the MSSNY memorialize the Legislature to bring its pressure to bear on the Chairman of the Workers' Compensation Board to abolish the regionalization of Workers' Compensation fees and to establish a single schedule of fees for all of New York State based on the negotiated relativity scale.

PAST HOUSE ACTION: Resolution 81-46 as Amended

◆

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenbain, M.D., *Chairman.*

The intent of this resolution is not in conformity with the Society's established position for usual and customary fees as enunciated in amended Resolution 81-46 which reads as follows:

> **Resolved,** That the Medical Society of the State of New York advocate the concept of usual, customary, and prevailing fees, and urge the abolishment of the zip code area designation.

⟹ Your reference committee recommends that Resolution 82-64 not be adopted.

⟹ *. . . The House, after discussion, voted to* **NOT ADOPT** *Resolution 82-64 . . .*

Resolution, 82-66, Fixed Fee Schedules in Workers' Compensation

Introduced by Section on Internal Medicine

Resolved, That the Medical Society of the State of New York deplore the use of fixed fee schedules in Workers' Compensation for physician reimbursement and take appropriate steps to work for the establishment of a fee reimbursement system based on usual, customary, and prevailing physicians fees.

PAST HOUSE ACTION: Substitute Resolution for Resolutions 80-19 and 80-45

◆

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

The reference committee's decision was based on the following previous House action (substitute resolution for Resolutions 80-19 and 80-45)

> **Resolved,** That the Medical Society of the State of New York disapprove fixed fee schedules and seek the adoption of payments based on usual, customary, and prevailing fees in all negotiations relating to fees where such negotiations are mandated by governmental agencies.

⟹ Your reference committee recommends that Resolution 82-66 be adopted.

⟹ *. . . The House, after discussion, voted to* **ADOPT** *Resolution 82-66 . . .*

Resolution 82-73, Delays in Authorization for Emergency and Urgent Treatment in Workers' Compensation Cases

Introduced by Section on Orthopedic Surgery

Whereas, Emergency care for treatment of injured workers is provided for in the Workers' Compensation Law; and

Whereas, Some of the care that is required during the initial few days of treatment after emergency care has been rendered is urgent but not an emergency; and

Whereas, Such treatment requires authorization in accordance with present regulations; and

Whereas, Delayed treatment may result in increased harm to the injured worker; and

Whereas, This imposes unnecessary hardship on doctors responsible for treating such cases; and

Whereas, The present state of affairs is professionally and socially undesirable; therefore be it

Resolved, That the Medical Society of the State of New York seek to introduce legislation to compel insurance carriers in Workers' Compensation cases to respond within seventy-two hours through a responsible official in charge who is able to evaluate cases and give authorization for urgently required procedures which are not necessarily emergency procedures; and be it further

Resolved, That in all cases where patients are hospitalized the insurance carrier be responsible for having someone see the patient in the hospital within seventy-two hours of being notified that such patient is hospitalized.

◆

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

Inasmuch as the Workers' Compensation Rules and Regulations, Title 12 NYCRR, 325-1.4 (Rule 4), pertains to this resolution, your reference committee recommends that Resolution 82-73 not be adopted.

⟹ Your reference committee recommends that Resolution 82-73 not be adopted.

⟹ *. . . The House, after discussion, voted to* **NOT ADOPT** *Resolution 82-73 . . .*

Resolution 82-17, No-Fault Fee Schedule Equal to Workers' Compensation Fee Schedule

Introduced by Section on Orthopedic Surgery

Whereas, The position of the Medical Society of the State of New York with respect to Workers' Compensation fees is that of usual, customary, and prevailing fees; and

Whereas, There are two fee schedules in the State of New York using Workers' Compensation fee rates as a minimum in compensation cases and as a maximum in no-fault cases; and

Whereas, With rapid change in the rate of malpractice insurance and the cost of practicing medicine many physicians who deal primarily in trauma where these cases are concerned are no longer taking these cases; and

Whereas, This situation is detrimental to the public; therefore be it

Resolved, That the Medical Society of the State of New York seek to introduce legislation to alter the present No-Fault Law to conform the rate structure to the Workers' Compensation system, as long as the law will continue to provide that Workers' Compensation rates be used, thus conforming the no-fault fee schedule to a minimum schedule rather than a maximum schedule to provide some degree of flexibility for those physicians who are still willing to take these cases.

■

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

The reference committee recommends disapproval of this resolution as it is inconsistent with the efforts of the MSSNY to reverse the extension of Workers' Compensation Fee Schedule to No-Fault cases.

⟹ Your reference committee recommends that Resolution 82-17 not be adopted.

⟹ . . . *The House, after discussion, voted to* **NOT ADOPT** *Resolution 82-17 . . .*

Resolution 82-60, Public Comment on Health and Human Services Regulatory Proposals

Introduced by Section on Internal Medicine

Whereas, Under the Administrative Procedure Act, rules relating to public property, loans, grants, benefits or contracts are exempted from the notice and comment requirement; and

Whereas, In 1970, Secretary Elliot Richardson made it agency policy to waive that exemption for the then Department of Health, Education, and Welfare entitlement programs; and

Whereas, The Secretary of Health and Human Services, Richard Schweiker, has proposed to change the waiver rule and require no notice and comment if this would impair the attainment of program objectives or would have other disadvantages; and

Whereas, The Reagan Administration, has embarked on a major effort to reduce social spending and to reform government regulations; therefore be it

Resolved, That the Medical Society of the State of New York requests the Secretary of Health and Human Services to refrain from any alteration in the present system of public comment and debate on proposed regulatory changes in entitlement programs, and furthermore that the Secretary involve the public and, in particular, the physicians, in any decision that involves health care services; and be it further

Resolved, That the Medical Society of the State of New York deplores the lack of opportunity for notice and comment on proposed regulatory changes in entitlement programs because the opportunity for public comment can often lead to sensible refinement and changes in proposed plans and to change or withdrawal of ill-conceived plans.

■

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

The intent of this resolution has already been carried out by letter to Richard S. Schweiker, Secretary, Department of Health and Human Services, but the reference committee recommends adoption of the principles embodied in the resolution.

⟹ Your reference committee recommends that Resolution 82-60 be adopted.

⟹ . . . *The House, after discussion, voted to* **ADOPT** *Resolution 82-60.*

Resolution 82-13, Impact of Physician's Assistants on the Health Care Delivery System

Introduced by New York County Medical Society

Whereas, New York County Medical Society's Committee on Hospital-Physician Relations studied the status, duties, and impact of physician's assistants on the health care delivery system at many sessions during its fall and winter, 1981, and spring, 1982, semesters; and

Whereas, It was determined that there is no specific information available as to the number of licensed physician's assistants in New York State who are practicing in hospitals, physician's private offices, or health care facilities; therefore be it

Resolved, That the Medical Society of the State of New York petition the New York State Education Department to publish annually a report listing the number and location of all licensed physician's assistants in New York State.

■

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that Resolution 82-13 be adopted.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-13 . . .*

Resolution 82-58, Hospital Admitting Privileges

Introduced by Section on Internal Medicine

Whereas, Privately practicing physicians have been the loyal backbone of most hospital staffs and privately practicing physicians have given freely of their time and energy for care of ward patients, teaching of house-staffs, committee work, and fund raising; and

Whereas, Federal research grants are being reduced and the style of medical practice is in a period of change and experiment; and

Whereas, Most of our population has medical insurance entitling them to private care, and it is advantageous for the patient to have continuity of care in the in-patient and out-patient setting; and

Whereas, A mix of different kinds of practice is advantageous to the training of future physicians; therefore be it

Resolved, That the Medical Society of the State of New York support by appropriate means the policy that hospitals should continue to offer equal hospital admitting privileges and equal access to beds to qualified physicians on their staff regardless of the physician's choice of reimbursement mechanisms or their financial arrangements with their hospital.

PAST HOUSE ACTION: Resolution 80-25 and Position Paper on Medical Staff Membership and Hospital Privileges for Private Practicing Physicians

■

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that Resolution 82-58 be adopted.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-58 . . .*

Resolution 82-62, Tithing of Voluntary Staff

Section on Internal Medicine

Whereas, The Voluntary staffs in hospitals are traditionally "independent contractors" and are not in a "master-servant" or "employer-employee" relationship with the hospitals; and

Whereas, Despite the fact that the Voluntary staff has major outside-the-hospital expenses for support services and overhead, the Voluntary staff has been generous with their time in hospital clinics, housestaff supervision, training, and committee work, and

Whereas, The Voluntary staffs have traditionally been generous with their own contributions to the hospital and in raising funds for the hospital from their private patients, therefore be it

Resolved, That the Medical Society of the State of New York shall disapprove of and actively oppose attempts by hospitals to impose a tax on the income of the Voluntary staff as an inappropriate limitation on the free exercise of a professional license in a public or semi-public institution.

■

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that Resolution 82-62 be adopted.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-62 . . .*

Resolution 82-21, State Medical Societies to Take Leadership Initiative in Establishing Statewide Peer Review Mechanism

Introduced by Milton Rosenberg, M.D., as an Individual

Whereas, On September 3, 1982, the President signed into law the Tax Equity and Fiscal Responsibility Act of 1982 (P.L. 97-248); and

Whereas, This Act has a subtitle called "the Peer Review Improvement Act of 1982" (embodying the Durenberger proposal) which repeals the existing PSRO program and which provides for the establishment of Utilization and Quality Control Peer Review Organizations (UQCPROs) to conduct many of the same functions as Professional Standard Review Organizations (PSROs); and

Whereas, The UQCPRO is defined as an entity which "is composed of a substantial number of licensed doctors of medicine and osteopathy engaged in the practice of medicine or surgery in the area and who are representative of the practicing physicians in the area" functioning under a negotiated contract; and

Whereas, Report A (A-82) of the American Medical Association Council on Medical Service, which was approved at the AMA Annual Meeting in June, 1982, urged state medical societies to embark on the "development of a statewide peer review plan"; and

Whereas, The provisions of the Peer Review Improvement Act of 1982, along with Report A (A-82), are mutually supportive; therefore be it

Resolved, That the Medical Society of the State of New York strongly support the recommendations of Report A (A-82) of the American Association Council on Medical Service by the AMA House of Delegates as passed in June, 1982; and be it further

Resolved, That the MSSNY take the leadership initiative in establishing a statewide peer review mechanism, either within its own capability or as a contracting agent.

■

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that Resolution 82-21 be adopted.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-21 . . .*

Resolution 82-29, Abuse of the MR-54 System

Introduced by Section on Orthopedic Surgery

Whereas, The Chairman of the Workers' Compensation Board has promulgated regulations providing for the use of the MR-54 form in cases where insurance carriers do not object to bills and do not pay them within the statutory period; and

Whereas, The filing of an MR-54 form provides some avenues by which carriers seek to avoid payment for the poor management of their cases; and

Whereas, This works a hardship on physicians who neither receive their payment nor receive the interest due them under the regulations; therefore be it

Resolved, That the Medical Society of the State of New York request of the Chairman of the Workers' Compensation Board that the use of the defense "Did not receive bill" be controlled by requirement that a copy of the bill in each instance be filed with the Chairman of the Workers' Compensation Board; and be it further

Resolved, That a copy of the bill filed with the Chairman of the Workers' Compensation Board shall constitute statutory evidence that the bill was filed timely and appropriately; and be it further

Resolved, That in cases where the Workers' Compensation Board has received the bill timely, that the defense of "Did not receive bill" be eliminated.

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⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that Resolution 82-29 be adopted.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-29 . . .*

Resolution 82-74, Copy of Workers' Compensation Notice of Decision to Last Physician of Record

Introduced by Section on Orthopedic Surgery

Whereas, Workers' compensation cases are subject to hearings by and judged by the Workers' Compensation Board; and

Whereas, Notice of such hearings are sent to "interested parties," namely, plaintiff, his attorney, and the carrier; and

Whereas, The last physician of record is presently not notified that the case is closed; and

Whereas, Decisions affecting treatment are frequently made at these hearings; and

Whereas, No provision exists in law for forwarding notice of decision and awards to the treating physician; therefore be it

Resolved, That the Medical Society of the State of New York introduce legislation that will mandate that the last treating physician shall receive a copy of the Workers' Compensation Notice of Decision and Award in each case after the hearing has been held.

PAST HOUSE ACTION: Resolutions 77-55 and 80-44

■

⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that Resolution 82-74 be adopted.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-74* . . .

Resolution 82-52, The Establishment of a MSSNY Committee to Monitor and Provide Input into the Social Security Administration Disability Benefits Program

Introduced by Nassau County Medical Society

Whereas, There is an ever-increasing demand for and re-evaluation of benefits under the Disability Benefits Program of the Social Security Administration; and

Whereas, This increasing demand is leading to progressively larger expenditures of public (Federal) monies; and

Whereas, Physicians participating in the program are not generally knowledgeable as to the type of factual information required for assignment or reassignment of benefits; and

Whereas, Organized medicine should have meaningful input into the determination and interpretation of the Federal criteria for disability and for fully understanding the medical and legal requirements involved in the adjudication of claims; therefore be it

Resolved, That the Medical Society of the State of New York establish a committee to study, interpret, publicize, and make recommendations through the Council to the Office of Disability Determinations in all matters relating to disability determinations under the Social Security Administration Program; and be it further

Resolved, That the Medical Director of the Office of Disability Determinations be asked to submit the name of a physician staff member of the Office for consideration by the President of MSSNY as an appointee to the committee. Such physician must be a member of MSSNY.

Fiscal Note: $1,000

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⟹ *Report of the Reference Committee on Medical Services:* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that Resolution 82-52 be adopted.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-52* . . .

Resolution 82-56, Social Security Disability Exams

Introduced by Section on Internal Medicine

Whereas, Social Security Disability examinations are extremely complex and often require a minimum of one hour for an adequate examination; and

Whereas, Social Security allowances for disability examinations do not reflect usual and customary fees for such examinations; therefore be it

Resolved, That the Medical Society of the State of New York seek appropriate changes in legislation and/or regulation to provide usual and customary fees for Social Security reports and examinations.

■

⟹ *Report of the Reference Committee on Medical Services.* The following report was presented by Felix R. Rosenhain, M.D., *Chairman.*

⟹ Your reference committee recommends that Resolution 82-56 be adopted.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-56* . . .

GOVERNMENTAL AFFAIRS AND LEGAL MATTERS

ETHICS

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Ethics are as follows:

Joseph G. Zimring, M.D., *Chairman*	Nassau
Theodore C. Jewett, Jr., M.D.	Erie
Michael L. Lewin, M.D.	Bronx
George P. Tilley, M.D.	Onondaga
Allan Tisch, M.D.	Orange
Gideon Tropp, M.D.	Chemung
Marcus Wiener, M.D.	Kings
* David C. Richard	Onondaga

The Committee was shocked and deeply saddened by the sudden and untimely passing of our legal advisor, J. Richard Burns, J.D. He was of great assistance to us, and he contributed a great deal of his legal knowledge to the work of the Committee throughout the many years that he served as legal counsel.

The Committee has received many inquiries from local county medical societies and individuals regarding the type of advertising that may be used. Most of them were answered after consultation with our legal counsel. Some cases required approval by the Council. The opinion of the Committee, on certain cases, is subject to the approval of the Council.

A letter was received by the committee from an attorney with the following questions:

> a) Dr. "A" rents space in the office of Dr. "B," paying 1/2 of the rent. If Dr. "B" becomes ill and Dr. "A" treats Dr. "B" 's patients, Dr. "A" intends to use Dr. "B," during his convalescence, as a consultant on Dr. "B" 's patients. Can Dr. "A" compensate Dr. "B" as a consultant?
>
> b) When Dr. "B" retires and Dr. "A" takes over his patients, Dr. "A" intends to consult Dr. "B" concerning treatment of all of Dr. "B" 's patients. Can Dr. "A" pay Dr. "B" for all of these consultations?

The committee felt that the above involves fee-splitting in an intricate fashion. If Dr. "B" wants to retire and sell his practice, he should do so on a fixed contract and not impose an added cost to the patient by additional consultations, unless medically indicated.

THE COUNCIL APPROVED THE WORDING
OF THE RESPONSE TO THE INQUIRY

The Committee has received several inquiries regarding the free distribution of prescription pads by an advertising firm. The top of the pad would have an ad of a drug sponsored by a major pharmaceutical company.

The Committee believes that distribution of free prescription pads will not be unethical if the patient in no way sees the ads and that the physician is not influenced in his prescribing habits.

THE COUNCIL APPROVED THE WORDING
OF THE RESPONSE TO THE INQUIRY

> The Committee received the following from a physician (an allergist): "A group of allergists wish to establish a medical laboratory in New York City to be used by all of them, as well as other physicians and hospitals. Fees for laboratory work will be charged to all, including owner physicians. The owner physicians wish to know whether it is ethical to forward samples from their own patients for analysis if they deem it necessary for diagnosis and treatment purposes."

The Committee feels that although it is not unethical for physicians to engage in a business enterprise, there is the possibility of overutilization for profit motives. In operating a medical laboratory, the physician must keep the primary benefit of the patient in mind. It is the opinion of the Committee that should such operation result in overutilization for the enrichment of the physicians, such conduct would be unethical.

THE COUNCIL APPROVED THE WORDING
OF THE RESPONSE TO THE INQUIRY

The Council was asked for approval of a policy on the use of "Do Not Resuscitate" orders on terminally ill patients in the event of cardiac or respiratory arrest. The Council referred this request to an Ad Hoc Committee, appointed by the President, for an indepth study on the use of the "DNR" orders. The Committee was to report back to the Council. The Chairman of the Committee on Ethics was appointed a member of the Ad Hoc Committee.

The Committee on Ethics met on April 30, 1982, to discuss several questions which were then referred to the Council for its approval. The Committee also approved the "Proposed Revisions of the Principles of Professional Conduct." This was then referred to the House Committee on Bylaws. The House Committee on Bylaws met on May 27, 1982. As Chairman of the Committee on Ethics, I attended this meeting, and, after some minor changes, the House Committee on Bylaws will refer this matter to the House of Delegates for its approval.

The Committee received a letter from an insurance company asking for the justification for a primary physician to make preoperative and postoperative visits to a patient who had been referred to a surgeon for necessary surgical procedures. The company also believes that this procedure incurs unnecessary medical expenses which have to be covered by medical insurance policies. The following was sent in reply to this letter:

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* Medical Student

"a) It is the primary physician's obligation not only to give preoperative medical clearance to his patient (especially patients over 40 years of age) but, it is also his obligation to follow the patient's postoperative medical condition to prevent or to detect any medical complications that may arise. This is especially important in the case of a patient who has a history of cardiovascular disease, diabetes mellitus, chronic respiratory disease, etc.

b) The decrease in mortality of surgical cases is not only the result of better surgery being performed, but also the result of good medical care given to the patient at the time of surgery.

c) It would not be cost effective to deny a patient ongoing medical care because medical complications would increase morbidity and mortality.

d) It would be not only unethical but illegal on the part of the primary physician to abandon an ill person that he refers for surgery."

The Committee on Ethics would like to express its deep appreciation for the counseling and cooperation given to it by Donald R. Moy, J.D., General Counsel, and also to Mrs. Joan Grimm for her cooperation and assistance.

The Chairman would like to express his appreciation to the members of the Committee on Ethics for their cooperation and understanding.

Respectfully submitted,

Joseph G. Zimring, M.D., Chairman

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⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Ethics be filed for information.

⟹ . . . *The report of the Committee on Ethics was* **FILED FOR INFORMATION** . . .

FEDERAL LEGISLATION

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on Federal Legislation are as follows:

William P. Clark, M.D., *Chairman*	Westchester
Richard J. Collins, M.D.	Livingston
Irwin Felsen, M.D.	Allegany
Seymour L. Halpern, M.D.	New York
Richard A. Konys, M.D.	Onondaga
Lawrence Ravich, M.D.	Nassau
* Mark Levitan	Nassau

General Overview. The major activity of the 97th Congress has focused on the budget reconciliation process and the Reagan Administration's proposed cuts in various federal spending programs. As a result, the Committee on Federal Legislation has postponed its usual Spring meeting until late summer or early fall when it is expected that, once the budgetary process has been completed, it will be possible to more accurately assess the viability of particular health legislation in Congress. In the meantime, the Committee has been closely monitoring developments in Congress, including the introduction of health-related proposals.

Major issues which arose during the early portion of the 1982 session of Congress included limitation on Federal Trade Commission (FTC) authority, the proposed Medicare and Medicaid cuts and the proposed replacement of the Health Planning Act with a federal block grant.

Cooperation with AMA. Following our established practice of cooperating fully with the AMA in furthering mutual objectives, your Committee in conjunction with MSSNY's administration, responded to the following AMA requests for action by communicating with our New York State Congressional delegation:

1. Opposition to S.158, the bill that would declare as national policy that "human" life begins at conception for the purpose of extending certain protections guaranteed by the 14th Amendment to the United States Constitution.
2. Support and co-sponsorship of H.R. 3722 which would place a moratorium on FTC activity concerning the learned professions;
3. Support and co-sponsorship of H.R. 4554 which would repeal the Health Planning Law (P.L. 93-641);
4. Opposition to the President's proposal to limit eligibility for guaranteed student loans to undergraduate students only; and
5. Support the Shelby-Madigan proposal which would repeal the current health planning law and replace it with a block grant to the states to be used for health planning purposes.

Headquarters Activities. Your Committee, through the activities of the Division of Governmental Affairs, keeps abreast of the latest developments in Congress through three reporting services. Current files are maintained on the major bills pending in both houses, copies of statutes enacted are also obtained and the AMA *Legislative Round-up* and *AMA Newsletter*, providing latest data on federal proposals, are mailed to each committee member. The regulatory activity of all federal agencies dealing with health and medicine is monitored by the division through the *Federal Register*. As issues arise requiring action by our Society, the division works with the administration and other staff divisions on the preparation of mailings to our congressional representatives and to governmental agencies. The division also cooperates in the preparation of reports on federal legislation for the *News of New York*.

Acknowledgments. Your chairman is most grateful to the members of your Federal Legislation Committee for their excellent assistance and cooperation. We appreciate the help given by numerous other individuals, including John H. Carter, M.D., Chairman, Commission on Governmental Affairs; Edward Siegel, M.D., Executive Vice-President; Martin J. Tracey, J.D., Director, Division of Governmental Affairs; Paul A. Tagliaferro, J.D., Assistant Director; and Vita Chilleme and Susan Fish, our secretarial staff. Finally, we should also like to thank the representatives of the American Medical Association, who have worked so effectively with us and rendered invaluable assistance.

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* Medical Student

Respectfully submitted,
William P. Clark, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Committee on Federal Legislation be filed for information.

⟹ . . . *The report of the Committee on Federal Legislation was* **FILED FOR INFORMATION** . . .

STATE LEGISLATION (ANNUAL)

To the House of Delegates, Ladies and Gentlemen:

The members of the Committee on State Legislation are as follows:

John H. Carter, M.D., *Chairman*	Albany
Frank A. Bersani, M.D.	Onondaga
Roger D. Billig, M.D.	Richmond
Clive D. Caplan, M.D.	Suffolk
Philip Cohen, M.D.	Kings
Alexander M. De la Garza, M.D.	Queens
William A. Dolan, M.D.	Monroe
John A. Finkbeiner, M.D.	New York
Samuel M. Gelfand, M.D.	Nassau
Stanley L. Grossman, M.D.	Orange
George Hyams, M.D.	New York
Henry W. Kaessler, M.D.	Westchester
Robert M. Kohn, M.D.	Erie
Dattatraya G. Lanjewar, M.D.	Bronx
Robert C. Mickatavage, M.D.	Westchester
Stephen P. Nicknish, M.D.	Clinton
Keun H. Park, M.D.	Broome
Wilfred Reguero, M.D.	New York
Wayne C. Templer, M.D.	Steuben
* Harvey Levitan	Nassau
Margaret Furlong, *Advisor*	Albany

GENERAL OBSERVATIONS

At the time this report is being written in early July, 1982, the State Legislature has recessed for the summer and is expected to reconvene in the fall to act on major problems requiring urgent consideration. The information, therefore, contained in this report is submitted to the House of Delegates as a progress report. An updated review will be presented in our supplementary report in September. Also, in that report we will submit the recommendations of your Committee, scheduled to meet in September, for MSSNY's 1983 State Legislation Program.

REPORT FORMAT

This report is divided into four major parts:

I. 1982 Session of the New York State Legislature — Overall Commentary;

II. Committee actions on resolutions and directives referred by the House of Delegates and Council, as well as Council actions on your Committee's recommendations;

III. Review of activities of MSSNY's Legislative Office and Legislative Counsel in Albany and staff operations at Lake Success; and

IV. Summary of miscellaneous matters.

I. 1982 SESSION—NEW YORK STATE LEGISLATURE—OVERALL COMMENTARY

In accordance with the directives of the House of Delegates in October, 1981, our basic State Legislative program for 1982 was prepared and presented to the 1982 State Legislature. A detailed description of each bill, as well as identification numbers, and present status, will be found later in this report. In order, however, to give the House a general understanding of developments before setting forth details, the following evaluation is presented.

OVERALL COMMENTARY

During the latter part of last year, cognizant of the fact that the Governor, administrative officials and legislative leaders were meeting on a regular basis to address the medical liability situation in New York, Division staff, along with our Legislative Counsel, the firm of Rice and Conway, worked on the development of an "omnibus malpractice bill." The bill, centered around the creation of a mechanism through which the cost of meeting medical liability claims over a defined amount would be borne by a far larger segment of society rather than by physicians alone, also contained a large number of other modifications of the present system to moderate excessive costs. The draft bill, which had been prepared after an extensive review of malpractice reform legislation considered or enacted in all of the other states, was distributed to all of the government officials involved in the medical liability discussions.

Early in the 1982 Session of the Legislature, in his Health and Human Services Message, the Governor acknowledged that potential premium increases again threatened the system and stated that an option to establish a malpractice excess recovery fund was being evaluated which "would call for all physicians to purchase minimum benefits coverage with a redesign of the premium rates to provide for a recovery fund while assuring insurance for specialists at a reasonable rate."

In response to increased pressure by the Medical Society, including the introduction of its omnibus bill, the Governor circulated a legislative package in early April which called for the establishment of a Medical Malpractice Catastrophe Fund to be financed through a surcharge on health insurers. In circulating the proposal, the Governor declared: "Unless steps are taken to address the escalating costs of malpractice insurance, future increases will severely burden the present insurance system for medical malpractice, threaten the availability of high risk medical procedures in the state and fuel further inflation in the cost of health care generally."

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* Medical Student

Almost immediately, the health insurance industry responded to the circulation of the Governor's proposal with a massive campaign to defeat the proposed surcharge, calling upon group and individual policyholders to express strong opposition to any increase in health insurance premiums based upon malpractice insurance costs. In spite of a determined effort by the Medical Society to counteract the public outcry generated by the health insurers, it became apparent that in response to such intense opposition, the proposed financing mechanism contained in the Governor's proposal would have to be modified substantially. In several important meetings held between Society representatives and legislative leaders, representatives of health insurers and the Governor's office several optional mechanisms were devised which are still being considered.

With the failure of the Insurance Department to make a final determination on the proposed insurance rates filed by the medical liability insurance companies by the July 1 deadline, the Legislature recessed without having taken any action on malpractice. The leaders of the Legislature are expected to review the situation following the final decision by the Superintendent regarding a rate increase. It is hoped that, at that time, the Legislature will take whatever appropriate action that is necessary.

In brief, the individual legislators and leaders of the Legislature, as well as the Governor and other key State officials have been thoroughly informed about the issues, have been supplied with numerous specific malpractice legislative solutions and are well acquainted with the problems presently confronting the profession regarding medical liability. Among the proposals which were introduced into the Legislature regarding malpractice are the following bills:

Omnibus Malpractice Proposal — includes the medical catastrophe fund, structured awards, malpractice panel bond, definition of expert witness, control of contingency attorney's fees, certificate of meritorious claim and provisions to expedite the court process.
(S.8706, Marchi, Pisani; A.10985, Bianchi, Hochbrueckner, Straniere, et al.)

Medical Catastrophe Fund — would create a State administered fund which would be financed by a surcharge on all amounts paid for indemnification for the costs of health care services. The amount of any judgment, rendered in a medical malpractice action, in excess of $100,000, would be paid out of the fund.
(S.6977, Marchi; A.8806, Bianchi)

Malpractice Panel Bond — would require the plaintiff to post a bond to cover the defendant's costs of defending a medical malpractice suit if the malpractice mediation panel finds unanimously against the plaintiff and he still proceeds to trial, and judgment is rendered in favor of the defendant.
(A.1517, Nadler; S.8742, Staford)

Medical Malpractice — Structured Awards — would require that in any action for medical malpractice in which an award is granted to the plaintiff for future pain and suffering which exceeds $100,000 after payment of attorney's fees, the court shall determine the most appropriate means of ensuring regular periodic payments out of such excess for the remainder of the plaintiff's life; would also provide for the payment of damages for loss of earnings, medical expenses, hospital charges and other expenses as such expenses are accrued or incurred, under court supervision.
(A.1330, Tallon) (S.2421, Pisani) (A.3658, P. Sullivan)

Investment Fund — Pain and Suffering Over $100,000 — Malpractice Only—would limit the lump sum payment of a malpractice action award for "pain and suffering" to $100,000. The court would be required to order any excess of that amount, after payment of attorney's fees and expenses, placed in one or more specified depositories or invested on behalf of the plaintiff as specified in the bill. Upon the death of the plaintiff, the principal invested would revert to the insurance carrier which paid on behalf of the defendant.
(S.6609, Lombardi)

Constitutional Amendment — Malpractice Only — would provide that the Constitution shall not limit the power of the Legislature to enact laws relating to compensation for personal injury to or for the death of persons resulting from malpractice by health care providers, with or without trial by jury.
(S.6610, Lombardi)

Malpractice Study Commission — would create a commission on medical malpractice to examine and study in depth the entire malpractice system and recommend a mechanism for compensation for injuries suffered as a result of medical treatment. The commission would be required to make a preliminary report to the Governor and the Legislature by April 1, 1982, and a final report by April 1, 1983.
(S.6608, Lombardi)

Malpractice Rate Freeze and Study Commission — would prohibit the superintendent of insurance from approving any increase in malpractice insurance premium rates until the first day of January next succeeding the date of submission of the final report to the Governor and the Legislature from a temporary State commission on medical malpractice insurance.
(A.7764, Morahan)

Malicious Prosecution Actions — would codify the action for malicious prosecution or reckless prosecution, abolishing the current special damage requirement and clarifying the element of malice.
(A.6765, Weprin) (A.4712, H. Miller)

Meritless Suits—Attorney's Fees — would provide that where a jury reaches an unanimous verdict for the defendant and finds that the plaintiff's action was completely without merit, the court shall direct the unsuccessful plaintiff to pay such reasonable attorney's fees as were actually charged to the defendant.
(S.409, Floss; A.648, Robach)

MAJOR BILLS OPPOSED BY MSSNY DEFEATED

The following key proposals opposed by MSSNY during the 1982 Session of the New York State Legislature were defeated:

Nurse Practitioner Bill. In mid-May, the Chairman of the Assembly Higher Education Committee, Assemblyman Mark A. Siegel, introduced a bill which would allow registered nurses to diagnose and treat illnesses and prescribe certain medications upon the nurse obtaining a written agreement with a physician to furnish back-up care and accept referrals. The bill was the result of nearly a yearlong effort sponsored by the Assembly Health and Higher Education Committees, the Senate Health Committee and the Education Department to gather background information and to develop legislation to provide for the expanded practice of nursing. During that time, the State Medical Society, through its Division of Governmental Affairs, its Department of Research and Development and its Albany Legislative Counsel prepared an extensive analysis of legislation enacted in other states regarding nurse practitioners, and issued extensive testimony regarding questions and proposals related to the expanded practice of nursing in this State. On numerous occasions, our Albany representatives commented and made recommendations regarding draft proposals and reports which were prepared by the Assembly Higher Education Committee staff on the subject. When the final draft proposal was introduced into the Legislature, our Albany representatives immediately communicated the objections of the State Medical Society to the main features of the bill.
(A.11922-A, Siegel; S.6650-A, Lombardi)

Attempts by sponsors in the Assembly to capitalize on confusion created by their own press releases and the resulting erroneous articles which subsequently appeared in the news media precipitated an all-out campaign, directed by our Albany representatives, to familiarize the entire Legislature with the State Medical Society's vehement and unreserved opposition to the bill. Unequivocal statements in opposition were immediately distributed to the entire Legislature. Immediate contacts were made with all county medical societies and with every major specialty society to encourage their strongest efforts to communicate their opposition to the bill to the Legislature. Legislators on key committees were contacted personally by our Albany representatives to eliminate any possible misunderstanding or confusion as to the position of the medical profession on the proposed bill. As a result of this massive effort, and the intense opposition which was generated, the proposal, which previously had been expected to pass the Assembly with ease, was never brought to the floor in either house of the Legislature.

Generic Drug Substitution. Continuing efforts which were initiated last year, the Assembly sponsor of the bill, Assemblyman Alexander B. Grannis, again sought legislative approval of his proposal A.5626-A, which would modify the current "generic drug law" to eliminate the two-line prescription form and require the prescriber to write in his own handwriting "dispense as written" if he desires to disapprove the substitution of a generic drug for the drug named on the prescription. Early this year, the Council of the State Medical Society reaffirmed its position in opposition to the bill and its recommendation that the bill be amended to provide for a box which could be initialed or checked by the physician to indicate that the prescription should be filled as written. The sponsor, however, refused to amend his bill to conform with the Council's recommendation. Due to the intense opposition of the State Medical Society to the unamended bill, which had passed the Assembly in previous sessions of the Legislature, it was defeated in the Assembly Consumer Affairs Committee and never made it to the floor in either house.

Optometric Drug Bill. This bill (S.2020-B, Bernstein; A.2020-B, Lasher), which would permit optometrists to use drugs under certain conditions, was the subject of a major effort by its proponents to gain legislative approval. It was reported to the floor in both houses; however, as a result of an intensive effort led by our Albany representatives, the bill was overwhelmingly defeated in a vote in the Assembly and never reached a vote in the Senate.

Access to Medical Records. Session-long efforts by the Governor's office and the Assembly Higher Education Committee to develop a proposal which would be acceptable to the State Medical Society ultimately proved unsuccessful. The bill, A.11146-A (Tallon), would have altered the traditional concept of physician ownership and control of medical records, and was opposed by the State Medical Society when sponsors failed to amend the bill to meet all of the Society's objections. Solely as a result of the continued opposition of the Society, the bill was never considered by either house of the Legislature.

Other key proposals which were defeated through efforts made on behalf of the State Medical Society include:

Definition of Podiatry — would have expanded the practice of podiatry to include structures of the leg governing functions of the foot.
(S.9107, Pisani) (A.11581, Serrano)
Chiropractors — Use of X-rays — would have expanded the permissible use of X-rays by chiropractors.
(S.5572, Marino) (A.8350, Hevesi)
Nursing Services — Insurance Reimbursement — would have permitted nurses to bill independently for their services.
(S.5251, Pisani) (A.7249, Nadler)
Malpractice Panels — Voluntary — would have provided that medical malpractice mediation panels shall operate only where all parties to the action agree to a panel hearing.
(S.3213, Dunne) (A.3371, Weprin)
Diethylstilbestrol (*DES*) — a bill to reopen all cases involving DES was amended, at the urging of our Albany representatives, to exclude any application to physicians.
(A.9382-B, M. Miller)
Medical Discipline Procedure — a last-minute effort to revise the medical discipline process was frustrated when our Albany representatives communicated the opposition of the State Medical Society against such an effort. Draft bill never introduced.

Numerous other proposals including bills on acupuncture, psychotherapy, naturopathy and the extension of medical fee schedules were held in committee due to the opposition of the State Medical Society. A complete report on the final status of all bills which were actively supported or opposed on behalf of the State Medical Society during the 1982 Session will be available at the House of Delegates meeting.

1982 MSSNY STATE LEGISLATION PROGRAM

The following is a detailed report on our basic State Legislation Program, previously mentioned, which was presented to the 1982 Session of the New York State Legislature. Although the first two proposals have already been reported, we are including them in this summary in order to present a report on the entire basic program. Appropriate identification numbers and present status of each bill are indicated.

Omnibus Malpractice Proposal — includes the medical catastrophe fund, structured awards, malpractice panel bond, definition of expert witness, control of contingency attorney's fees, certificate of meritorious claim and provisions to expedite the court process.
(S.8706, Marchi, Pisani; A.10985, Bianchi, Hochbrueckner, Straniere, et al.)
In Senate and Assembly Insurance Committees.

1. *Medical Catastrophe Fund* — would create a State administered fund which would be financed by a surcharge on all amounts paid for indemnification of the costs of health care services. The amount of any judgment, rendered in a medical malpractice action, in excess of $100,000 would be paid out of the fund.
(S.6977, Marchi; A.8806, Bianchi)
In Senate and Assembly Insurance Committees.

2. *Malpractice Panel Bond* — would require the plaintiff to post a bond to cover the defendant's costs of defending a medical malpractice suit if the malpractice mediation panel finds unanimously against the plaintiff and he still proceeds to trial and judgment is rendered in favor of the defendant.
(A.1517, Nadler; S.8742, Stafford)
In Senate and Assembly Judiciary Committees.

3. *No-Fault Insurance Law Amendment* — would amend the No-Fault Insurance Law to provide that health service charges shall not exceed usual and customary charges as determined by a committee of the county medical society wherein such services were performed, provided, however, that in counties wherein such committees do not exist, the superintendent shall determine such charges based upon the usual and customary charges imposed for the performance of the same or similar services in such counties.
(S.1235-A, Marchi; A.3983-A, Connelly)
In the Senate and Assembly Insurance Committees.

4. *Professional Service Corporation Tax Law Amendments* — would amend the Tax Law to permit contributions paid on behalf of shareholders of Professional Service Corporations to pension plans to be accorded the same tax treatment as is afforded to shareholders of other business corporations.
(A.281, Robach; S.972, Pisani) (S.4810, Marchi; A.4490, Kremer)
In the Senate Tax Committee and the Assembly Ways & Means Committee.

5. *Insurance Coverage for Emergency Medical Treatment in Physicians' Offices* — would require every group insurance policy which provides for physicians' services to include coverage for emergency medical services provided in physicians' offices
(A.1855, Tallon; S.4043, Lombardi)
In Senate and Assembly Insurance Committees.

6. *Medical Society Involvement in Physician Discipline* — would require the state committee on professional conduct to expand its scope to include a newly created county board of professional conduct to function at the county level. Such board would transmit its findings, conclusions and recommendations to the state committee for its consideration and final recommendations to the State Health Commissioner. A county board would be made up of not less than 5 physicians, members in good standing of a county medical society, a component part of MSSNY.
(S.5177, Pisani; A.10297, Proud, Seminerio, Cooke)
In Senate and Assembly Health Committees.

Opposition to A.7305 (Engle), *Workers' Compensation — Maximum Fee Schedule* — would provide that the schedule of charges and fees for medical treatment shall be a maximum rather than a minimum fee schedule. Held in Assembly Labor Committee.

II. COMMITTEE ACTIONS

Your Committee met in Albany on March 15, 1982, to review activities in Albany and to consider items referred to the Committee by the House of Delegates, the Council and others and to make recommendations to the Council. Included in the agenda were matters reported under the following headlines pertaining to the House and Council:

HOUSE OF DELEGATES RESOLUTIONS — 1981

The following resolutions and actions were referred to the State Legislation Committee from the 1981 House of Delegates. These resolutions were reviewed carefully by your Committee, and the following actions were taken:

1. **Resolution 81-24, Physicians' Lien Law. Adopted and referred by the House of Delegates.**
   Resolved, That the Medical Society of the State of New York vigorously pursue the enactment of legislation to provide for a Lien Law in favor of physicians.
   RECOMMENDATION — Sponsors of similar legislation introduced in previous sessions were contacted and a draft proposal was submitted to them for introduction.

2. **Substitute Resolution for Resolution 81-35, Resolution 81-48 and 81-52, Claims Made Medical Liability Insurance. Adopted and referred by the House of Delegates.**

Resolved, That the Medical Society of the State of New York continue to advise all appropriate government officials and the public that a medical liability crisis exists which poses a grave threat to the quality of health care available to the people of this State, and that no increase in the cost of medical liability insurance is acceptable; and be it further

Resolved, That the Medical Society of the State of New York unequivocally oppose "claims made" policies because such policies do nothing to reduce the cost of medical liability insurance; and be it further

Resolved, That the Medical Society of the State of New York continue to seek passage of a legislative program which includes meaningful solutions to this crisis. These proposals will restore equity and fairness to the liability adjudicatory process.

RECOMMENDATION — Correspondence expressing opposition to claims-made medical liability insurance was sent to the entire Legislature and to the Governor as part of the effort to implement the amended resolution. The Society's representatives in Albany in regular meetings with key legislative leaders repeatedly pointed out the serious shortcomings and deficiencies of the claims-made approach and the necessity for immediate enactment of substantial malpractice reform legislation. (See discussion on malpractice in Part I of this report)

3. **Resolution 81-50, Opposition to Mandated CME for Reregistration of State License to Practice Medicine. Adopted and referred by the House of Delegates.**

Resolved, That the Medical Society of the State of New York oppose any state or federal legislation and/or regulation which mandate proof of CME for reregistration of a license to practice medicine.

RECOMMENDATION — No such legislation or regulation was introduced or proposed. The State Medical Society has opposed such legislation in the past.

4. **Resolution 81-37, Laws Governing Driving While Intoxicated. Adopted and referred by the House of Delegates.**

Resolved, That the Medical Society of the State of New York actively participate, through their legislative consultants and other appropriate channels, in supporting antidrunk driving measures in the Legislature; and be it further

Resolved, That the Medical Society of the State of New York, through its legislative consultants, propose legislation which would effectively remove intoxicated driver's from the road by either an immediate temporary suspension of a driver's license or an immediate revocation of a driver's license based upon the blood alcohol content of the driver sufficient to convict of "Driving While Intoxicated" rather than "Driving While Impaired."

RECOMMENDATION — Substantial revisions to the law increasing penalties and establishing programs to reduce injuries were enacted in 1981 with the support of the Medical Society. Several additional proposals, introduced during the 1982 Session and actively supported by the Society's representatives in Albany, were passed by the Legislature and are awaiting action by the Governor. The final status of these bills will be included in the brochure of Health Legislation which will be available at the House of Delegates meeting.

5. **Resolution 81-38, Driving While Intoxicated. Adopted and referred by the House of Delegates to the Committee on Alcoholism and to this Committee.**

Resolved, That the Medical Society of the State of New York support citizens' groups working to reduce the death and injury toll caused by drunken driving; and be it further

Resolved, That the Medical Society of the State of New York instruct its appropriate committees to sponsor legislation relating to the drinking driver and to serve as a liaison between the medical profession and citizens' groups to help coordinate a comprehensive program against alcoholism.

RECOMMENDATION — See discussion above relating to Resolution 81-37.

6. **Resolution 81-47, Supporting the Law Regarding Car Seats for Children Under the Age of Five. Adopted and referred by the House of Delegates.**

Resolved, That the Medical Society of the State of New York promote the use of protective passive restraint systems for children under five years of age.

RECOMMENDATION — Chapter 407 of the Laws of 1981 required children under the age of five to be restrained in specially designed detachable or removable seats. Chapter 29 of the Laws of 1982 amended that Law to apply to children under the age of four and to require four or five year old children to be restrained in such a seat or by a safety belt. Both measures were supported by the State Medical Society.

COUNCIL ACTIONS

1. **Resolution 81-60, New York State Income Tax Tuition Deduction. Referred by the House of Delegates to the Council. Referred by the Council to General Counsel and to this Committee.**

Resolved, That the Medical Society of the State of New York sponsor and support legislation pertaining to a change in the regulations regarding the ability of a husband/wife to claim as a dependent for the purposes of the Income Tax Tuition Deduction, his/her student-spouse, such that the said husband/wife might be properly eligible to take such a deduction.

RECOMMENDATION — This resolution was discussed at the Committee meeting on March 15, 1982, but the Committee was unaware that the resolution had been referred without having been adopted. The resolution will be placed on the agenda for the next Committee meeting in September.

2. At its meeting on February 11, 1982, the Council approved a recommendation of the Executive Committee that the position taken by the Council on April 16, 1981, with regard to proposed generic drug legislation be reaffirmed. On

that date, the Council had approved a recommendation that language be provided to the effect that a box with a printed legend, indicating that if checked or initialed by a physician the prescription would have to be dispensed as written.

RECOMMENDATION — The action of the Council was transmitted to the sponsor of the bill who subsequently declined to amend his proposal to bring it into conformity with the Council action. As a result of the continued opposition to the bill by the State Medical Society the bill was defeated in the Assembly Consumer Affairs Committee.

3. At its meeting on March 25, 1982, the Council discussed the Governor's Program Bill #318, which deals with access to patient information, and voted to oppose the proposal.

RECOMMENDATION — The opposition of the State Medical Society and the reasons therefor were transmitted to the Legislature and to the proponents of the bill. Subsequent attempts by the sponsors to amend the bill to meet the objections of the Medical Society proved insufficient. The continued opposition by the Medical Society resulted in the failure of the bill to be considered by either house of the Legislature.

4. At its meeting on March 25, 1982, the Council approved a recommendation of the Committee on Medical Care Insurance that the Medical Society of the State of New York take the necessary steps to seek mandatory inclusion of medical services in the New York State No-Fault Insurance Law for patients who are injured as a result of a social problem, i.e., intoxication.

RECOMMENDATION — This action will be placed on the agenda for the September meeting of this Committee at which time proposals for inclusion in the 1983 State Legislation Program are to be considered.

5. At its meeting on March 25, 1982, the Council amended Resolution 81-6, Curtailment of Subpoena Powers of the Board for Professional Medical Conduct by the addition of a second resolved, adopted the amended resolution, and referred it to this Committee for implementation. The amended resolution reads as follows:

> **Resolved,** That the Medical Society of the State of New York seek to amend subdivision (10) of Section 230 of the Public Health Law so that the Board for Professional Medical Conduct will be specifically prohibited from subpoenaing a physician or his medical records concerning psychiatric treatment rendered to another physician, when the patient-physician is the subject of an inquiry or investigation by the Board, and when such patient-physician voluntarily sought the psychiatric care, unless the patient-physician expressly waives the physician-patient privilege; and be it further
>
> **Resolved,** That it is the position of the Medical Society of the State of New York that the confidential relationship between a physician and his patient shall remain inviolate.

RECOMMENDATION — The resolution was transmitted to the Assembly Higher Education and Health Committees for their consideration. Early in the Session, the Governor's proposal on malpractice was circulated. This proposal included several amendments to the discipline process which were found to be acceptable to the State Medical Society, provided that the entire package, including the catastrophic fund provisions, were considered and approved as a unitary package. During the last few days of the Session, when it appeared that the Governor's package would not be considered by the Legislature, efforts were made by the Assembly to extract many of the discipline portions of the Governor's bill and include them in a separate bill on discipline. On behalf of the State Medical Society, our Albany representatives opposed this effort, but indicated that if the above recommendation on subpoena powers were included in the proposed discipline bill, the Society might reconsider its opposition. Due to the lateness of the Session and the opposition of the Medical Society, the Assembly dropped its effort to amend the discipline process.

6. At its meeting on April 22, 1982, the Council approved the recommendation of the Committee on Aging and Nursing Homes that consideration be given to the formulation of laws by the State of New York which would make it more financially feasible for families or other persons to care for the elderly at home rather than in an institutional setting.

RECOMMENDATION — On behalf of the State Medical Society, memoranda were issued in support of the following bills: S.7788 (Smith), A.9707 (Siegel), which would include proprietary home care service agencies in the definition of "certified home health agencies"; and S.8940-A (Auer), which would require health insurance policies which provide for home health care to include coverage for cancer chemotherapy and cancer hormone therapy. The latter bill has passed both houses of the Legislature and presently awaits action by the Governor.

7. At its meeting on April 22, 1982, the Council discussed a recommendation by the Committee on Emergency Health Services that the Medical Society of the State of New York support bills S.8029 (Solomon) and A.9993 (Wilson), which would require CPR training as an integral part of the required health education course at the senior high school level. The Council approved the concept of voluntary training in cardiopulmonary resuscitation (CPR) as an integral part of the required health education course at the senior high school level.

RECOMMENDATION — The bills which were the subject of the Emergency Health Services Committee's recommendation did not pass either house of the Legislature.

8. At its meeting on April 22, 1982, the Council approved a motion to oppose the concept of any legislation which would legally permit nurse practitioners to set up an independent practice of medicine as defined by diagnosis, treatment and prescription writing.

RECOMMENDATION — As was previously reported in Part I of this report, our Albany representatives directed an extensive and intense campaign in opposition to the current proposal to expand the practice of nursing. As a result of this effort the bill did not reach the floor of either house of the Legislature.

9. At its meeting on May 27, 1982, the Council approved recommendations contained in the staff report concerning financial aid for graduate and professional students. The recommendations stated in the report which were approved by the Council were:

a. To review and comment upon Senate Bills 9683, 9202 and 7709, as well as any other bills which might be introduced pertaining to financial aid for medical education, keeping in mind the concerns expressed in the original recommendations (2)b and (2)c; and

b. To include among MSSNY's overall legislative priorities the continuation of adequate federal and state financial assistance to assure that qualified students are not denied access to a medical education.

RECOMMENDATIONS — The Division of Governmental Affairs participated in the preparation of the staff report and the recommendations to the Council. The Division continuously monitored developments in Albany regarding the student loan program and communicated, on behalf of the Society, the opposition of the profession to the cutbacks which had initially been proposed by the Governor. Funding for the State program ultimately was restored by the Legislature and the above referenced proposals were introduced in an effort to expand and improve the State student loan program.

10. At its meeting on June 23, 1982, the Council approved the recommendations of the Committee on Alcoholism that the following bills be supported by the Medical Society of the State of New York:

S.9433 (An act to amend the mental hygiene law, in relation to defining the terms "alcoholism community residence")

A.10301 (An act to amend the education law, in relation to instruction in high schools upon the effects of alcohol and drug use on driving)

RECOMMENDATION — Memoranda in support of the above mentioned bills were being prepared by Legislative Counsel at the time the Legislature recessed on July 3, 1982; however, the Legislature's Committee activity had already been suspended prior to the action by the Council. Consequently, the above mentioned bills could not be moved out of Committee.

III. ALBANY OPERATIONS AND HEADQUARTERS

Due to the prolonged illness of the Director, which rendered him unable to perform his duties since September, 1981, the Assistant Director assumed primary responsibility for directing the activities of the Division. During that time, the Albany Legislative Office was established across the street from the Legislative Office Building in Albany to develop a continuous liaison with the Legislature, the agencies, of government and our Albany legislative representatives. The activities of this office have since been expanded to include the regular communication of current legislative information to county and specialty societies and the coordination of combined legislative efforts to influence the Legislature regarding important issues affecting the medical profession.

The Albany Legislative Office, in addition to its duties directly involving the legislative process in Albany which includes such routine matters as the screening of Legislative Index materials, the examination and referral of legislation, the gathering of background information relative to legislative issues, the preparation of legislative memos and statements and their appropriate dissemination, regularly and routinely screens the *Federal Register*, the *New York State Register*, notices of public and legislative hearings, releases from the various agencies and departments, publications of other health care groups, and voluminous materials and statements from the American Medical Association. Any announcement, notice or item which is considered to be of importance or interest to any other division or department of the Society is immediately referred for information, review and comment as appropriate.

Concentrating on the staffs of certain key committees, the Albany Office successfully developed working relationships with key staff members of the Senate and Assembly Insurance, Higher Education and Health Committees. These relationships resulted in the early communication to the Society of new developments on proposals affecting health care and enabled the Society to have meaningful input regarding the formulation of these proposals.

Our State Medical Society's weekly legislative bulletin, *Capitol News*, has been published in Albany during each session of the State Legislature since 1965. This publication was delivered each week to all members of the Legislature, county medical society officers and executives, and key physicians throughout the State. The *Capitol News* is designed to keep its readers abreast of important developments in health legislation in New York State and to advise them of the opinion of the State Medical Society on the key health issues which are being discussed in the Legislature. To date, 20 issues have been distributed this year.

The Albany Legislative Office also is responsible for the review of state and federal legislation pertaining to health care and the practice of medicine. Extensive files are maintained on key topics and issues which arise concerning the relationship of medicine and government, as well as on individual bills which are introduced in the State Legislature and in Congress.

During the 1981–82 State Legislative Session of the New York State Legislature, approximately 23,500 bills have been introduced. These bills were screened by staff and by Legislative Counsel. Those involving health care (more than ten percent) were referred for analysis and comment to the appropriate divisions within the State Medical Society. These comments, as well as recommendations from county medical society leaders via the Legislation Opinion Report of *Capitol News*, were considered along with information in our Division files and previous memoranda prepared by Legislative Counsel in establishing the State Society's position on all health legislation. Position statements and memoranda on more than 160 specific bills were prepared in cooperation with our Legislative Counsel and disseminated to the legislators and governmental officials.

HEADQUARTERS ACTIVITIES

The Albany activities received strong back-up support from the Division staff at Headquarters in Lake Success. The staff maintained extensive files on both state and federal legislative proposals and issues and assisted in the preparation and dissemination of legislative memoranda and divisional reports. The staff also cooperated with other Society divisions by providing them with necessary information and seeking their advice and recommendations on pending legislation and regulations. Memoranda on the more than 160 individual legislative proposals previously mentioned were distributed not only to the legislators, but to members of the State Medical Society Council, Board of Trustees, State Legislation Committee and to staffed county medical societies.

Information and materials for publication in the *News of New York* were provided by the staff of the Division through its Legislation Information Center. Varied requests for information from county medical societies, individual members, the AMA and others were answered as quickly as possible. In addition, suggestions and opinions obtained from individual members and county medical societies regarding legislative issues were tabulated and recorded for use in preparing the State Society's positions on specific legislation.

The Division continued to distribute the publication entitled "*A Physician's Guide to the New York State Legislature*," which describes the procedure of the State Legislature and contains necessary information and advice on how to contact legislators effectively. The Division also prepared and distributed its publication entitled "*1981 Health Legislation*" which is a concise report on health bills of major interest to the medical profession acted upon during the Session of the New York State Legislature. A similar report for the current 1982 Session will be prepared and distributed after the vital information necessary is available.

LEGISLATIVE COUNSEL

The activities of our State Medical Society at the Capitol are the result of a joint effort by our Division and our Legislative Counsel, the firm of Rice & Conway. Mr. Rice and Mr. Conway established their own law firm after many years with the law firm of DeGraff, Foy, Conway and Holt-Harris, where they worked on MSSNY matters.

Communications setting forth MSSNY's views and positions on important health legislation were drawn up and reviewed in close cooperation with the Division staff, which played a vital role in their preparation and mass distribution. The statements were filed with the Governor, the leadership in both chambers of the Legislature, chairmen and members of committees considering health bills, the sponsors of the bills and individual members of both houses. To reinforce these written statements, our Legislative Counsel and Assistant Director regularly met the lawmakers personally to discuss in detail the bills and the issues to which they related in more detail. Our Legislative Counsel also worked closely with our Assistant Director and other State Society representatives on government regulatory matters.

IV. MISCELLANEOUS MATTERS

PUBLIC HEARINGS & PRIVATE CONFERENCES

Since last September, our State Medical Society has presented a number of statements at public hearings conducted by governmental agencies and legislative committees. In addition, Society representatives, including our Assistant Director and Legislative Counsel, have met privately with key administrative officials and lawmakers on a variety of important matters. Among the major topics addressed have been malpractice reform legislation, professional licensure and discipline, nurse practitioner legislation, the optometric drug bill, and generic drug legislation.

NEW YORK STATE ASSOCIATION OF THE PROFESSIONS (NYSAP)

Your Committee through the Albany Legislative Office worked very closely with the New York State Association of the Professions in regard to numerous legislative problems of common interest.

COMMITTEE MEETING—ANNUAL CONFERENCE

As mentioned frequently in this report, your Committee is scheduled to meet in September, at State Medical Society Headquarters, for the primary purpose of developing recommendations for MSSNY's 1983 State Legislation Program and your Committee's future activities, which will be submitted in the fall to the House.

Our annual conference of county medical society legislative representatives was held in Albany on March 16, 1982, during which county society representatives discussed medicine's views in personal visits with legislators in their offices at the State Capitol. We believe that this meeting was a vital part of the effort to obtain favorable legislator reactions to issues of concern to the profession. Your Committee plans to continue this successful Albany Conference in early 1983.

ACKNOWLEDGMENTS

On behalf of your Committee, and especially your Chairman, we thank all who cooperated with us. To Legislative Counsel, John C. Rice, Esq., and Gerard L. Conway, Esq., we are indebted for their work in furthering our legislative goals. We also express our gratitude to Edward Siegel, M.D., Executive Vice-President, who was continuously involved with our Committee at the decision-making level. Thanks also go to Martin J. Tracey, J.D., Director, Division of Governmental Affairs; Paul A. Tagliaferro, J.D., Assistant Director; and to Vita Chilleme and Susan Fish, Division secretarial staff.

Respectfully submitted,
John H. Carter, M.D., *Chairman*

STATE LEGISLATION (SUPPLEMENTARY)

To the House of Delegates, Ladies and Gentlemen:

This report supplements the information contained in our annual report which was prepared in early July, 1982.

1982 LEGISLATIVE SESSION

At the time of the preparation of our Annual Report in early July, the New York State Legislature had recessed for the summer and was expected to reconvene at some point during the Fall for the purpose of acting on major problems left unresolved when the recess took place. It is now a virtual certainty that the session will resume in late November or early December. It is also a virtual certainty, however, that despite some pressure to consider a wide range of important legislative issues, the Senate and Assembly will actually direct their attention only to fiscal issues of major Statewide importance. Consequently, we do not expect that the "wind-up" session will become involved in any way with specific health issues of particularized concern to the members of the Medical Society of the State of New York.

As indicated in our Annual Report, the Legislature was not prepared to take immediate and major action in the area of medical liability legislation until such time as the actual scope of the problem was delineated through Insurance Department action involving a specific rate increase. Preliminary information which had been made available to certain key legislators indicated to these individuals that the rate increase requested by the Medical Liability Mutual Insurance Company of 73% was not going to be approved. Similarly, this information indicated that the rate increase of 247% which had been requested by MMIA would also be rejected. Additionally, it was widely known among legislators that "claims-made" insurance would be offered with Department approval thereby further ameliorating the "urgent" dimension of the medical liability insurance rate situation from a legislative standpoint. Following the recess of the regular session, the Superintendent of Insurance, after extensive negotiations with medical liability insurers, including MLMIC, approved a rate increase for the current policy year of 15%. This action was taken by the Department on September 28, 1982. While most legislators agree that the present costs of medical liability insurance present an extremely serious situation requiring legislative attention and meaningful legislative solutions, these same legislators feel that the rate increase actually approved this year did not radically change the present situation in a way that would require the enactment of statutory relief at a "Special Session" of the Legislature. In essence, the Department's action was not viewed as substantially changing the nature or character of the problem and thus "instant action" at such a "Special Session" would be very difficult to achieve. There continues to be, however, a broad-based legislative recognition of the extreme seriousness of the problem and a general commitment to the enactment of a "solution" in the immediate future.

On a more positive side, since the recess of the Legislature in July, we have seen significant progress on the part of the "Medical Liability Reform Coalition." This group was organized during the latter part of the session. Its membership is composed of, inter alia, Alliance of American Insurers, American Insurance Association, The Business Council of New York State, the New York State Conference of Blue Cross and Blue Shield Plans, Medical Malpractice Insurance Association, Medical Liability Mutual Insurance Company and the New York Chamber of Commerce and Industry. This coalition is committed to the introduction of an omnibus bill at the 1983 Session of the New York State Legislature which would embody significant tort reforms. Specifically included in the tort reforms which in all likelihood will be addressed within the omnibus bill are life-structured awards, contingency fee limitations, maximum limitations on pain and suffering awards as well as a variety of other modifications to the present law which will all serve to ameliorate many of the more serious inequities in the present tort liability adjudicatory system. Your Committee is most encouraged by this development and has recommended that MSSNY join with this "coalition" in making enactment of this bill our highest 1983 priority.

COMMITTEE MEETING

Your Committee met at Society headquarters on October 14, 1982, to develop MSSNY's 1983 State Legislation Program. Since it was impossible to schedule a meeting of the State Legislation Committee in time to present a report to the Council, this report is being submitted directly to the House of Delegates.

Your Committee reviewed all major developments during the 1982 Session of the New York State Legislature, including our own State Legislation Program, as well as Governor Carey's Medical Liability Catastrophe Fund, the Nurse Practitioner Act, medical records legislation and many other important issues.

Following in-depth discussions, your Committee voted to recommend that the following proposals be included in our *1983 State Legislation Program*:

I. **Medical Liability Issues**

A. *Tort Reform.* An omnibus legislative proposal is expected to be introduced at the 1983 Session of the New York State Legislature under the sponsorship of the "Medical Liability Reform Coalition." This bill will reflect basic tort reform in a number of areas, including the following: requirement of a certificate of merit; tightened standards for expert testimony; a requirement for a plaintiff to post a bond; a maximum limitation on the amount of jury's award intended to compensate for pain and suffering; limitation on attorney's contingency fees; life structured awards; organized medicine involvement in physician discipline; and a constitutional amendment permitting a new compensation system in medical liability cases. Passage of this legislation will be the primary legislative objective of MSSNY in 1983.

B. *Omnibus Malpractice Proposal.* An omnibus legislative proposal which includes the medical catastrophe fund risk-spreading concept, structured awards, malpractice panel bond, definition of expert witness, control of contingency attorney's fees, certificate of meritorious claim and provisions to expedite the court process. (Similar to the legislation proposed by Governor Carey during the 1982 Legislative Session.)

II. **Key Economic Issues**

A. *No-Fault Insurance Law Amendment* — would amend the No-Fault Insurance Law to provide that no health service charges shall be set at less than the usual and customary charges as determined by a committee of the county medical society wherein such services were performed.

B. *Alcohol Related Accident No-Fault Law Amendment* — would amend the "No-Fault" Law to assure that health care provider was paid regardless of the involvement of alcohol as a possible cause of the accident which caused the injury being treated.

C. *Professional Service Corporation Tax Law Amendments* — would amend the Tax Law to permit contributions paid on behalf of shareholders of Professional Service Corporations to pension plans to be accorded the same tax treatment as is afforded to shareholders of other business corporations.

D. *Insurance Coverage for Emergency Medical Treatment in Physicians' Offices* — would require every group insurance policy which provides for physicians' services to include coverage for emergency medical services provided in physicians' offices.

III. **General Issues**

A. *Medical Society Involvement in Physician Discipline* — would require the state committee on professional conduct to expand its scope to include a newly created county or district board of professional conduct to function at the local level. Such board's findings, conclusions and recommendations would be reviewable as set forth in present law. Local board would be made up of not less than 5 physicians, members in good standing of a county medical society, on recommendation of MSSNY. (This concept is also treated in I(A) and (B) above.)

B. The Committee reviewed the guidelines on "Do Not Resuscitate" orders. A motion was made and passed that "Definition of Death" legislation similar to the State of Massachusetts statute should be introduced into the Legislature of the State of New York.

IV. **Anticipated Important Health Legislation**

The Committee determined that among the numerous health issues which could reasonably be expected to surface at the 1983 Session were the following:

A. Nurse Practice
B. Medical Records
C. Expansion of Authority of Various Allied Health Professions
D. Medical Fee Level Issues
E. Generic Drugs

The Committee determined that MSSNY, through its Division of Governmental Affairs, should pay particular heed to these issues and work actively to assure that no legislation was enacted in these areas which would contravene the respective positions of the Medical Society of the State of New York on these matters.

With respect to IV(E) above, the following resolution was unanimously passed:

Whereas, The MSSNY is in favor, whenever possible, of reducing the cost of care to the patient and understanding that the freedom of the physician to specify a brand name remains inviolable and accepting the value of the freedom from liability incorporated in the latest Grannis-Lack Generic Drug Substitution Bill; therefore be it

Resolved, That the Medical Society of the State of New York withdraw its opposition to the Grannis-Lack Generic Drug Bill so long as the method of specifying brand name drugs remains simple, such as D.A.W. (in place of "Dispense as Written") or checking one of two boxes.

FOR APPROVAL BY THE
HOUSE OF DELEGATES

REGENTS LEGISLATIVE CONFERENCE

The Board of Regents conducted its Annual Legislative Conference in Albany in September. The purpose of this meeting is to give to each profession regulated by the State Education Department an opportunity to present its legislative recommendations and comments on the Regents' legislative proposals for the coming year. MSSNY's views were set forth in a statement delivered on behalf of our Executive Vice-President. Among the topics covered by our State Medical Society were the optometric drug bill, the malpractice situation and proposed legislation which would expand the practice of nursing. In addition, MSSNY strongly urged that the Regents consult with concerned professions during the initial stages of the development of specific legislative proposals rather than after a proposal, such as the one involving nurse practitioners, has been drafted.

Once again, your Chairman, on behalf of your Committee, conveys our thanks to all who participated in our endeavors during the 1982 Session of the New York State Legislature. Your Chairman personally is most grateful to the members of the Committee for their continuing wholehearted cooperation.

Your Chairman would also like to take this opportunity to express my personal gratitude and the Committee's gratitude to the staff of the Division of Governmental Affairs, particularly Mrs. Vita Chilleme, and to our legislative Counsel, the firm of Rice & Conway.

Respectfully submitted,

John H. Carter, M.D., *Chairman*

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⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman*.

⟹ Your reference committee recommends that the annual and supplementary reports of the Committee on State Legislation be filed for information.

⟹ . . . *The annual and supplementary reports of the Committee on State Legislation were* **FILED FOR INFORMATION** . . .

Your reference committee noted that featured within the supplementary report of the Committee on State Legislation was a presentation of the State Medical Society's State Legislation Program for 1983.

⟹ Your reference committee recommends approval of this proposed legislative program.

⟹ . . . *The House* **APPROVED** *the recommendation of the reference committee* . . .

JUDICIAL COUNCIL

To the House of Delegates, Ladies and Gentlemen:

The members of the Judicial Council are as follows:

George L. Collins, Jr., M.D., *Chairman*	Erie
Ralph S. Emerson, M.D.	Nassau
Joseph J. Kaufman, M.D.	Wayne
Carl Goldmark, Jr., M.D.	New York
George T. C. Way, M.D.	Dutchess
Milton Rosenberg, M.D., *President, ex officio*	Suffolk
Victor J. Tofany, M.D., *Secretary, ex officio*	Monroe

In accordance with the requirements of Article VII, Section 3, of the Bylaws, the Judicial Council held an organizational meeting on October 14, 1981, immediately following the close of the annual meeting of the House of Delegates. George L. Collins, Jr., M.D. was elected chairman.

The Judicial Council is pleased to report that no appeals were presented to it to date, and, therefore, no meetings were held.

Respectfully submitted,

George L. Collins, Jr., M.D., *Chairman*

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⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Judicial Council be filed for information.

⟹ . . . *The report of the Judicial Council was* **FILED FOR INFORMATION** . . .

NEW YORK STATE ASSOCIATION OF THE PROFESSIONS (NYSAP)

To the House of Delegates, Ladies and Gentlemen:

The members of the Board of Directors of the New York State Association of the Professions are as follows:

Edward Siegel, M.D.	*Executive Vice-President*
Henry I. Fineberg, M.D.	*Executive Vice-President Emeritus*
Carl Goldmark, Jr., M.D.	*Past President*

The New York State Association of the Professions (NYSAP) was organized to promote legislation favorable to professions licensed to practice under the laws of the State of New York, and to their constituents, and to oppose any undesirable legislation. This objective includes regulations, primarily those of the State Education Department and the Board of Regents.

Eight organizations make up NYSAP: These are: New York State Association of Architects; New York State Society of Certified Public Accountants; Dental Society of the State of New York; Medical Society of the State of New York; New York State Council of Landscape Architects; New York State Society of Professional Engineers; New York State Veterinary Medical Society; and Pharmaceutical Society of the State of New York.

Many years ago, our State Medical Society was largely responsible for the establishment of NYSAP and was one of the founding organizations. Since its creation, MSSNY has been a principal and formidable supporter of the organization, not only through active participation in its activities but through financial contributions.

In belonging to NYSAP, our State Medical Society has the unique opportunity to join with other licensed professions in presenting a united front on issues of common interest. Such opportunity presents itself frequently not only in the area of State legislation, but in the field of regulations by State governmental agencies.

We are unanimous in the belief that NYSAP has an extremely important function to perform in presenting the views of the licensed professions in New York State to the State legislators in Albany on a united front basis. As a means of strengthening NYSAP, we feel that more individual members are needed. Once again, therefore, we recommend that a notice briefly explaining NYSAP and urging MSSNY members to become members of NYSAP be published, if feasible, in an appropriate MSSNY publication, such as the *News of New York* and the *New York State Journal of Medicine.*

Respectfully submitted,

Edward Siegel, M.D.
Henry I. Fineberg, M.D.
Carl Goldmark, Jr., M.D.

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⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

Your reference committee would hope that the medical component of the New York State Association of the Professions become more active in educating the public as to the benefits that professionals bring to their chosen field and the important societal needs served by the various professions.

⟹ Your reference committee recommends that the report of the New York State Association of the Professions be filed for information.

⟹ . . . *The report of the New York State Association of the Professions was* **FILED FOR INFORMATION** . . .

PROFESSIONAL MEDICAL LIABILITY INSURANCE AND DEFENSE BOARD

To the House of Delegates, Ladies and Gentlemen:

The members of the Professional Medical Liability Insurance and Defense Board are as follows:

Robert E. Fear, M.D., *Chairman*	Suffolk
James H. Cosgriff, Jr., M.D., Vice-Chairman	Erie
Charles F. Begg, M.D.	New York
Samuel M. Gelfand, M.D.	Nassau
Robert E. Gordon, M.D.	Kings
William G. Hamilton, M.D.	New York
Herbert Lourie, M.D.	Onondaga

Harold N. Schwinger, M.D.	Kings
John F. Spring, M.D.	Broome
M. Theodore Tanenhaus, M.D., *Advisor*	Kings
Milton Rosenberg, M.D., *President, ex officio*	Suffolk
Victor J. Tofany, M.D., *Secretary, ex officio*	Monroe
John A. Finkbeiner, M.D., *Treasurer, ex officio*	New York
Donald R. Moy, J.D., General Counsel, *ex officio*	Nassau
Donald J. Fager, J.D., *Executive Secretary, ex officio*	New York

Our professional liability insurance system continues to deteriorate. Last year, you will recall, the Superintendent of Insurance denied our Company's request for a 52% rate increase and approved an increase of 27% even though his own independent actuary said that an increase of 107% was necessary. The Medical Malpractice Insurance Association which had been denied an increase of 210% obtained a court order requiring the Insurance Department to have a formal hearing on its request. That hearing is still in progress. This year our Company, Medical Liability Mutual, filed for a 73% increase effective July 1, 1982. The Insurance Department has indicated that it will not approve an increase above 15%. It has also approved a claims-made policy which will be 34% of the occurrence rate for the first year, but will rise dramatically thereafter and will equal and may even exceed the occurrence rate by the fourth or fifth year. The limitation of the increase and the claims-made policy should not distract us from the essential fact that the size of awards continues to escalate dramatically and the ultimate burden still rests on the physicians in this State who must pay the onerous premiums. The Medical Society and the Company have continued to exert their very best efforts to convey this message to the legislators. While attempts to enact the Medical Catastrophe Fund Bill did not meet with success, it was no small accomplishment that the Chief Executive of this State publicly acknowledged that doctors could no longer be asked to bear the burden of an intolerable system alone. It is also interesting to note that many of the forces who vigorously opposed the Catastrophe Fund concept indicated their willingness to be completely supportive of our program to accomplish tort reform. Efforts are under way to mobilize that support.

The Board's work load continues to be very heavy. The day-long meetings that are held once a month give only a hint of the Board's activity, for Board members spend countless hours reviewing claim materials in order to properly prepare for the meetings. In addition, each and every Board member has a very keen sense of responsibility since the actions which they recommend to the Company may have a profound impact on the practice of a physician. It is reassuring, therefore, to receive comments such as the following from a doctor who was recently interviewed:

> "The hearing I attended was conducted in a very professional manner, and it is gratifying to know that the affairs of the Medical Society of the State of New York are in the hands of competent, well-informed and interested people."

The Board continues to see the occasional physician who presents an unacceptable loss record because his methods of practice fall below proper standards. Since our last report, we have found it necessary to recommend that six physicians have their insurance cancelled or not renewed at expiration. In one case in which a physician was applying for coverage with the Company, we recommended that his application be denied. You can be assured that these drastic remedies are not taken lightly by the members of the Board and are resorted to only after very careful evaluation and a full recognition of the Board's obligation to all.

The Board may also recommend that a physician pay a premium with a surcharge (that is, a higher rate than is paid by all of the other doctors in his classification). Again, this will occur only after a detailed analysis of the doctor's claim experience. In this connection, I should note that we are frequently reminded that the Board's role of peer evaluation is an important safeguard to physicians insured in our Company. On several occasions this year doctors who were insured by the Medical Malpractice Insurance Association (the Joint Underwriters Association) sought to change their coverage to our insurance company. We interviewed the doctors because they were surcharged by MMIA. Their surcharges, however, were not based on any peer evaluation of their claims. MMIA has a schedule which provides that a doctor must pay a surcharge when he has a certain number of "chargeable losses." Chargeable losses are defined as "an indemnity payment or *reserve* (emphasis added) in excess of $10,000." This may be a reasonable way to surcharge automobile drivers, but it certainly does not seem equitable for a physician in the present climate of malpractice claims.

APPEALS

The guidelines for appealing recommendations of the Board to the Council have been the subject of considerable discussion between members of the Board and officials of the Medical Society for the past few years. All parties were in agreement that the appeal mechanism should be preserved. However, there was some question as to whether the Council was truly acting in an appellate capacity or merely offering another hearing on the issues. I am pleased to report that under the leadership of Milton Rosenberg, M.D., President of MSSNY, the Council adopted revised guidelines which limited the scope of appellate review to the following issues:

> Procedural due process—the committee (ad hoc committee of the Council) shall review prior procedures to insure fundamental fairness. It shall be the burden of the appellant to prove unfairness.
>
> Reasonableness of the determination of the Professional Medical Liability Insurance and Defense Board. The committee shall review the prior proceeding to determine whether the action of the Defense Board is arbitrary, capricious or unreasonable.

CLASSIFICATION

As premium rates continue to increase, the Board receives more and more inquiries from physicians seeking lower specialty classifications. While the Board is sympathetic to these requests, it cannot, in fairness to all the policyholders, recommend reduction in classification where the physician, although limiting his practice in some respects, continues to engage in major surgery. Many doctors have asked about a special rate because they engage in a part-time practice. While the Company does not have any provision at present for such a discount, Dr. Arthur J. Mannix, Jr., the President of MLMIC, has designated a committee to explore this matter again, in depth.

The Board was concerned about the complaints of some physicians, particularly in the upstate area, that family practitioners were unwilling to assist at surgery because of higher premium charges and that surgeons, therefore, had to use assistants who were not as experienced. Traditionally, family practitioners who assisted at surgery for their own patients could be in Premium Class 7 and those who assisted for other than their own patients had to be in Class 6. The Board felt that the complaints had merit and assistance at surgery should be in Class 7 regardless of whether it was the doctor's patient or not. The Company endorsed the recommendation subject to the approval of the Insurance Department.

SUGGESTIONS FOR PATIENT CARE

The Board is constantly seeking ways to help the physician reduce his liability exposure. During the course of an interview the Board members try to spot weaknesses in the physician's methods of practice which make him particularly vulnerable to claims. We trust that the observations Board members make in this regard will be helpful to all physicians. Some of the principal ones follow:

1. RECORDS SHOULD CLEARLY AND ACCURATELY REFLECT THE PATIENT'S HISTORY AND THE DOCTOR'S FINDINGS, DIAGNOSIS AND TREATMENT.
2. THERE SHOULD BE CAREFUL FOLLOW-UP OF ALL PATIENTS AND RECORDS SHOULD INDICATE THE FAILURE OF A PATIENT TO KEEP AN APPOINTMENT.
3. BE AWARE OF THE IMPORTANCE OF SEEKING CONSULTATION AS SOON AS INDICATED IN DIFFICULT CASES.
4. MAKE CERTAIN THAT YOUR WORK LOAD IS NOT SO HEAVY THAT YOU CANNOT DEVOTE ADEQUATE TIME TO EACH PATIENT.
5. DO NOT CREATE UNREASONABLE EXPECTATIONS ABOUT THE RESULTS OF TREATMENT.
6. BE AWARE OF THE NECESSITY OF COMMUNICATING TO YOUR PATIENT, IN SIMPLE LAYMAN'S LANGUAGE, THE GENERALLY RECOGNIZED RISKS AND COMPLICATIONS OF THE TREATMENT RECOMMENDED AND THE ALTERNATIVES THERETO. FURTHER, MAKE AN ENTRY IN YOUR RECORD TO INDICATE THAT YOU HAVE GIVEN THE PATIENT SUCH INFORMATION.
7. CAREFULLY SCRUTINIZE YOUR PROCEDURES FOR COLLECTING OVERDUE ACCOUNTS. NO ACTION SHOULD BE TAKEN TO COLLECT A BILL UNTIL ALL THE CIRCUMSTANCES HAVE BEEN REVIEWED.

This Board could not adequately complete the tasks assigned to it without the very valuable assistance of its various subcommittees. Many of these committees meet monthly and, like the Board members, spend many additional hours reviewing claim information. I wish to thank Howard Freedman, M.D., Chairman of the Subcommittee on Neurosurgery, Carl Goldmark, Jr., M.D., Chairman of the Subcommittee on Obstetrics and Gynecology, Edgar P. Berry, M.D., Chairman of the Subcommittee on Cosmetic and Plastic Surgery, George E. Froehlich, M.D., Chairman of the Subcommittee on Orthopedic Surgery, Alexander L. Hastie, M.D., Chairman of the Subcommittee on Anesthesiology, and all of their Committee members.

Finally, I must end on a very sad note. We were deeply distressed by the death of two men who made vital contributions to the Board during their years of service — David Kershner, M.D., and J. Richard Burns, J.D. Dr. Kershner was a member of the Board for many years and a past Chairman. His service to the Board and the medical profession was invaluable. Mr. Burns, General Counsel, MSSNY, was a most knowledgeable and helpful advisor. We shall miss his wise counsel.

Respectfully submitted,

Robert E. Fear, M.D. *Chairman*

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⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

⟹ Your reference committee recommends that the report of the Professional Medical Liability Insurance and Defense Board be filed for information.

⟹ . . . *The report of the Professional Medical Liability Insurance and Defense Board was* **FILED FOR INFORMATION** . . .

Resolution 82-32, Claims Made Insurance and Hospital Staff Privileges

Introduced by Morton M. Safran, M.D., as an Individual

Whereas, The cost of malpractice insurance for claims occurrence policies has escalated to the point of being non-affordable by many physicians; and

Whereas, The Medical Liability Mutual Insurance Company now offers claims made policies at a much lower rate than claims occurrence premiums; and

Whereas, Many physicians who have opted for the claims made coverage are being denied hospital staff privileges; and

Whereas, It is morally, ethically, and possibly legally wrong for hospitals to deny staff privileges to a physician with claims made coverage; therefore be it

Resolved, That the Medical Society of the State of New York investigate the legality of hospitals denying privileges to those physicians with claims made professional medical liability insurance coverage.

■

⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

Your reference committee wishes to amend the resolution by the addition of the following resolved portion:

Resolved, That since the claims made policy has been mandated by the Superintendent of Insurance of the State of New York, he should be urged by the Medical Society of the State of New York to take appropriate action to protect all physicians and present it to all hospitals for acceptance as a matter of extreme urgency.

⟹ Your reference committee recommends that Resolution 82-32 be adopted as amended.

After discussion, the House amended the second resolved. The resolved portions of Resolution 82-32 would then read as follows:

Resolved, That the Medical Society of the State of New York investigate the legality of hospitals denying privileges to those physicians with claims made professional medical liability insurance coverage; and be it further

Resolved, That since the claims made policy is now authorized as an alternative to the occurrence policy, the Superintendent of Insurance of the State of New York, as a matter of extreme urgency, should be urged by the Medical Society of the State of New York to take appropriate action to make claims made insurance acceptable to hospitals requiring medical liability insurance for staff privileges and to protect all physicians, especially those with occurrence policies.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-32 as* **AMENDED** *and* **AMENDED** . . .

Resolution 82-41, Professional Liability Insurance Discount

Introduced by Medical Society of the County of Queens

Whereas, The number of incidents of liability cases continues to rise; and

Whereas, A large number of these cases are avoidable through participation in an accredited liability prevention course; therefore be it

Resolved, That the Medical Society of the State of New York request those insurance companies writing medical liability insurance to offer a premium discount to those physicians who have satisfactorily completed a course in professional liability.

■

⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

The reference committee agrees with the principle of physician education as a means of curtailing the incidence of professional liability suits and risk avoidance, but views the granting of discounts as impractical. The committee recommends that the Council investigate means to motivate physicians to engage in such educational activities to this end. Further, the reference committee strongly suggests that the term "malpractice" be replaced by "professional liability" in future reference to the subject.

⟹ Your reference committee recommends that Resolution 82-41 not be adopted.

⟹ . . . *The House voted to* **NOT ADOPT** *Resolution 82-41* . . .

Resolution 82-53, Regulation 101, "Waiver of Consent"

Introduced by Section on Internal Medicine

Whereas, The New York State Department of Insurance has published in the May 28, 1982, issue of the *New York State Register* proposed rule making calling for a new Regulation 101 in Part 70 to Title 11, New York Code of Rules and Regulations, mandating a "waiver of consent" option for purchasers of professional liability insurance; and

Whereas, The new regulation, promulgated by the State Insurance Department, will go into effect October 1, 1982; and

Whereas, The regulation is written in such a way as to deter physicians from retaining the right to consent to proposed "out of court" settlements between plaintiff and defendant in professional liability suits; and

Whereas, The regulation has the effect of further removing physicians from the process of professional liability litigation in the State of New York which may have the long-term effect of further exacerbating the professional liability crisis; therefore be it

Resolved, That the Medical Society of the State of New York oppose Regulation 101 in Part 70 to Title 11 of the New York Code of Rules and Regulations which requires an insurer to offer the "no consent" policy to insureds.

■

⟹ Report of the Reference Committee on Governmental Affairs and Legal Matters: The following report was presented by Seymour R. Stall, M.D., *Chairman.*

Your reference committee recognizes that this has already been mandated by the State Insurance Department, but, nevertheless, feels that the resolution should be adopted to reaffirm the opposition of the Medical Society of the State of New York to this regulation and to further inform and remind physicians of the disadvantages of waiving their consent right.

⟹ Your reference committee recommends that Resolution 82-53 be adopted.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-53* . . .

Resolution 82-18, Constitutional Amendments for Torts

Introduced by Section on Orthopedic Surgery

Whereas, There is a crisis in the cost of malpractice insurance in the State of New York which is escalating out of control; and

Whereas, There is also an increasing crisis in obtaining insurance in cases of product liability; and

Whereas, There is an increasing tendency on the part of juries to award sums of money that are unrelated to the reality of the injury suffered, the care of the individual and the care of dependents; and

Whereas, There is an increasing tendency for claimants to seek punitive as well as compensatory damages which cannot be insured against; and

Whereas, There is a general breakdown in our entire system of tort law because of the inability of the Legislature to cope with the problems in the interest of the public welfare; and

Whereas, It is clearly not in the public welfare to destroy the system by extraordinary awards in cases of injury; and

Whereas, The cost of defending such actions is increasing, leading to unwarranted settlements which are therefore made in order to cut down expense; and

Whereas, It is clear that a constitutional amendment is necessary; and

Whereas, The people of the State of New York did enact a constitutional amendment to provide for workers' compensation; therefore be it

Resolved, That the Medical Society of the State of New York be requested to introduce and support legislation to amend the Constitution of the State of New York, specifically Article I – Bill of Rights, by adding a new section that shall contain the following language: "Nothing contained in this constitution shall be construed to limit the power of the Legislature to enact laws for the protection of the lives, health or safety of the public; or for the payment by funding methods enacted by the Legislature; or by providing for the maintenance of persons who have been injured by awards, by impartial panels created by the Legislature; and by the creation of a Department of Public Safety by the Legislature to administer such laws; and by providing for arbitration or trial by jury as determined by the Legislature with or without consent of the parties, and to provide, if necessary, for a fund derived from a surcharge on all insurance policies issued in the State of New York by carriers who are insuring against torts of any types, to provide for the necessary costs of compensation, medical care, education, rehabilitation, social welfare and any other form of benefit devised by the Legislature; and there should be no limit on the part of the Legislature to enact laws in the field of torts for the benefit of the public as a whole;" and be it further

Resolved, That the Medical Society of the State of New York shall seek to have this legislation introduced and passed by two successive Legislatures, and then to have it offered to the public in the form of a referendum as required by the Constitution of the State of New York to be enacted into public law.

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⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman*.

Your reference committee has considered Resolution 82-18 and wishes to present the following substitute resolution:

Resolved, That the Medical Society of the State of New York introduce, individually or in conjunction with others, a resolution which will amend the Constitution of the State of New York in a manner which will permit the legislature to enact laws providing for the resolution of professional liability claims through administrative procedures without juries, including limitations on the amount and manner of payment of any damage awards, regulation of attorneys fees, and any such other laws as will remove the inequities inherent in the present litigation system.

⟹ Your reference committee recommends adoption of the substitute resolution for Resolution 82-18.

⟹ . . . *The House voted to* **ADOPT** *the substitute resolution for Resolution 82-18* . . .

Resolution 82-30, Restitution/Compensation Clauses in Informed Consents

Introduced by Bronx County Medical Society

Whereas, Recommendation Number 1 of the report of the Special Advisory Panel on Medical Malpractice (McGill Commission), State of New York, January, 1976, recognized that the present tort law/liability insurance system for medical malpractice will eventually break down with costs that will reach unacceptable levels; and

Whereas, The Panel's overriding concern was to create a system of compensation for adverse medical outcomes resulting from medical treatment, whether or not caused by negligence; and

Whereas, They cited the need for such a system to be coordinated with other compensation systems limited to the bonafide needs of patients; and

Whereas, Pain, suffering, and biological damages are the natural consequences of disease processes; and

Whereas, No duty is owed to a patient for the practitioner to remove the pain, suffering, and biological damages; and

Whereas, Physicians are judged by the standards of ordinary negligence instead of gross negligence; and

Whereas, An informed consent is a recognized entitlement for a patient in advance of major intervention treatment; and

Whereas, The signature of a patient on a consent form is an accepted practice which documents the informing process; and

Whereas, There are unforeseen damages that may occur from the risks inherent in health care under the best of circumstances; and

Whereas, Precedent already exists for restitution/compensation clauses to be included in the consent forms for patients undergoing research where federal funds are utilized; and

Whereas, The Special Advisory Panel also encouraged pilot projects in voluntary arbitration of the Medical Society of the State of New York and the Hospital Association of New York State as an innovative experiment in new procedures for prompt and fair disposition of malpractice claims; and

Whereas, There is serious need to cap awards and for state and federal tort reform; and

Whereas, Litigation alone has failed as a compensating mechanism which no longer serves the public interest for malpractice restitution; and

Whereas, The inhumane lottery which currently exists must come to an abrupt halt; therefore be it

Resolved, That restitution/compensation clauses in the informed consents be investigated by the Medical Society of the State of New York as a possible mechanism through first party insurance protection for recipients of health care, as an elective contractual alternative to the present system to avoid the hardships that have been precipitated through archaic tort laws.

The author of Resolution 82-30 suggested the following substitute resolution:

SUBJECT: **Patient Protection Clauses in Consent Forms**

Whereas, Recommendation Number 1 of the report of the Special Advisory Panel on Medical Malpractice (McGill Commission), State of New York, January, 1976, recognized that the present tort law/liability insurance system for medical malpractice will eventually break down with costs that will reach unacceptable levels; and

Whereas, The Panel's overriding concern was to create a system of compensation for adverse medical outcomes resulting from medical treatment, whether or not caused by negligence; and

Whereas, They cited the need for such a system to be coordinated with other compensation systems limited to the bonafide needs of patients; and

Whereas, Pain, suffering, and biological damages are the natural consequences of the disease processes; and

Whereas, No duty is owned to a patient for the practitioner to remove the pain, suffering, and biological damages; and

Whereas, Physicians are judged by the standards of ordinary negligence instead of gross negligence; and

Whereas, An informed consent is a recognized entitlement for a patient in advance of major intervention treatment; and

Whereas, The signature of a patient on a consent form is an accepted practice which documents the informing process; and

Whereas, There are unforeseen damages that may occur from the risks inherent in health care under the best of circumstances; and

Whereas, Precedent already exists for patient protection clauses to be included in the consent forms for patients undergoing research where federal funds are utilized; and

Whereas, The Special Advisory Panel also encouraged pilot projects in voluntary arbitration of the Medical Society of the State of New York and the Hospital Association of New York State as an innovative experiment in new procedures for prompt and fair disposition of malpractice claims; and

Whereas, There is serious need to cap awards and for state and federal tort reform; and

Whereas, Litigation alone has failed as a compensating mechanism which no longer serves the public interest for malpractice restitution; and

Whereas, The inhumane lottery which currently exists must come to an abrupt halt; therefore be it

Resolved, That the insertion of patient protection clauses in consent forms be investigated by the Medical Society of the State of New York as a possible mechanism through first party insurance protection for recipients of health care and subjects participating in clinical research, as an elective alternative to the present system to avoid the hardships that have been precipitated through archaic tort laws.

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⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

Your reference committee believes that this resolution raises many complex issues currently under consideration in the ongoing evaluation of potential solutions to the medical liability insurance crisis and that it is appropriate that any specific action with respect to the position of the Medical Society of the State of New York on these issues be taken only after further data generation and evaluation is completed. We note the resolution calls for an investigation of the proposed approach to this problem.

⟹ Your reference committee recommends that Resolution 82-30 and the substitute resolution be referred to the Council.

⟹ . . . *The House voted to* **REFER** *Resolution 82-30 and the proposed substitute resolution to the Council . . .*

Resolution 82-72, Binding Arbitration

Introduced by Section on Psychiatry

Whereas, The Dean of the New York Law School has indicated that a significant portion of the costs of medical liability insurance go toward legal and investigatory costs by claimant and defense; and

Whereas, A former Chief Judge of the Court of Appeals suggested that the courts would probably look favorably upon binding arbitration, provided:

a) that it could be shown that it would reduce medical costs,

b) that it would be fair, i.e., not of the "Cotton Exchange" variety; and

Whereas, Chief Justice Burger of the U.S. Supreme Court has recommended the use of arbitration rather than litigation in personal injury cases; therefore be it

Resolved, That the Medical Society of the State of New York recommend to the doctors and hospitals of this State that binding arbitration be offered to all patients; and be it further

Resolved, That careful statistical records be kept by the MSSNY to see if such arbitration will decrease medical costs while increasing claimants' recoveries.

The following is an example of a consent form:

CONSENT, RELEASE and AGREEMENT

Having been informed of the use of SPECIAL INJECTIONS, SHOCK TREATMENTS, ANECTINE, BREVITAL, METRAZOL, etc., in nervous or mental disorders, and also of the risks involved, I nevertheless request Dr. to administer any of these treatments and anesthetic that he, in his opinion, may consider advisable to with the hope that they may benefit the patient's condition, and I hereby release and his associates from responsibility for any untoward results that may follow. I do not want the patient hospitalized. I promise that all of the doctor's instructions will be followed.

AGREEMENT TO ARBITRATE

The doctor is part of a group that is trying to keep medical costs down. The doctor, the patient and those who sign for the patient, all agree that in case of a dispute or disagreement, other than over nonpayment of fees, that these matters will be settled by arbitration in accordance with principles set down either by the Medical Society of the State of New York, or by the Empire State Physicians Guild. It is further agreed that this arbitration will be binding.

Signed______________________________

Date________Address______________________________

______________________________________M.D.

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⟹ Report of the Reference Committee on Governmental Affairs and Legal Matters: The following report was presented by Seymour R. Stall, M.D., *Chairman.*

Your reference committee is in agreement in principle with the concept involved. However, we have been informed that when challenged in court, binding arbitration agreements in professional medical liability cases have not been upheld as valid by the courts in virtually every case.

⟹ Your reference committee recommends that Resolution 82-72 not be adopted.

⟹ . . . *The House voted to* **NOT ADOPT** *Resolution 82-72* . . .

Resolution 82-38, Physicians in the New York State Legislature

Introduced by Suffolk County Medical Society

Whereas, It has become obvious that organized medicine has very few, if any, friends in the New York State Legislature; and

Whereas, If we are to obtain passage of proper tort reform legislation addressing the medical liability insurance crisis, we need legislators who will give 100% maximum effort where that legislation is concerned; and

Whereas, Having physicians in the State Legislature to act as resources for other legislators on medical subjects would be extremely beneficial; therefore be it

Resolved, That it should be the active policy of the Medical Society of the State of New York to support the concept of the election of at least one physician to the New York State Senate and at least two physicians to the New York State Assembly; and be it further

Resolved, That the Medical Society of the State of New York urge the New York Medical Political Action Committee to formulate a plan calculated to bring this about, and then to fully implement that plan.

⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

The committee amended Resolution 82-38 to read as follows:

Resolved, That it should be the active policy of the Medical Society of the State of New York to support the concept of the election of qualified physician candidates to the New York State Senate and to the New York State Assembly; and be it further

Resolved, That the Medical Society of the State of New York urge the New York Medical Political Action Committee to formulate a plan calculated to bring this about, and then to fully implement that plan.

⟹ Your reference committee recommends that Resolution 82-38 be adopted as amended.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-38 as* **AMENDED** . . .

Resolution 82-76, Financial Aid for Medical Students

Introduced by Mark Levitan, Theodore M. Mazer, and Robin Tapper, Medical Student Delegates

Whereas, Equal access to a medical education for all qualified students has been placed in jeopardy by the attempts of the Reagan Administration to cut drastically the federal government's financial aid programs which are available to medical students; and

Whereas, The future of New York State-funded loan programs is similarly in doubt; therefore be it

Resolved, That the Medical Society of the State of New York continue to support the continuation of funding, at 1982 levels or greater, of all existing state and federal student loan programs which are currently available to medical students; and be it further

Resolved, That the MSSNY reaffirm its position to appropriate government officials, both those newly elected and those presently in office.

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⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

The committee amended Resolution 82-76 to read as follows:

Resolved, That the Medical Society of the State of New York continue to support the continuation of funding, at 1982 levels or greater, of all existing state and federal student loan programs which are currently available to medical students; and be it further

Resolved, That the MSSNY reaffirm its position to the appropriate government officials, both those newly elected and those presently in office; and be it further

Resolved, That medical students who receive loans from funds originated in NewYork State be encouraged to remain in New York State to practice in the private or public sector of medicine.

⟹ Your reference committee recommends that Resolution 82-76 be adopted as amended.

⟹ . . . *The House, after considerable discussion, voted to* **ADOPT** *Resolution 82-76 as* **AMENDED** . . .

Resolution 82-45, Establishment of a Parallel Organization for United Political Action

Introduced by Richmond County Medical Society

Whereas, The regulation, often unjustified, of the practice of medicine by state and federal agencies, is increasingly oppressive; and

Whereas, The cost of medical liability insurance is constantly increasing; and

Whereas, The Medical Society of the State of New York and the political action committees have, over the years, directed their best efforts toward alleviating these and other problems facing the medical profession; and

Whereas, These efforts have not met with the success that they merit; therefore be it

Resolved, That the Medical Society of the State of New York examine yet again the feasibility of establishing a parallel organization empowered to lead its members into united political and economic action; and be it further

Resolved, That this examination be treated as a matter of extreme urgency.

PAST HOUSE ACTION: Resolution 81-2

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⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

Your reference committee notes that implementation of this resolution should not be adopted at this time nor considered until the activities described are established to be legal for the Society as presently constituted. Your reference committee also notes that the Council of the Medical Society of the State of New York through the Office of General Counsel is currently studying and evaluating the legal issues presented by the Medical Society of the State of New York's involvement in this type of activity.

⟹ Your reference committee recommends that Resolution 82-45 not be adopted.

⟹ . . . *The House, after discussion, voted to* **REFER** *Resolution 82-45 to the Council* . . .

Resolution 82-15, Legislative Consultants (Lobbyists) of the Medical Society of the State of New York

Introduced by Nassau County Medical Society

Whereas, The Legislature of the State of New York has not implemented any meaningful tort changes based on the McGill Commission's recommendations since 1975; and

Whereas, It is believed that further concentrated lobbying efforts should be attempted in order to secure legislation on this and other serious medical issues; therefore be it

Resolved, That the Medical Society of the State of New York review and reevaluate its legislative processes both outside and in-house; and be it further

Resolved, That MSSNY supplement its efforts in Albany with a lobbyist who will devote his entire energies toward serious medical issues; and be it further

Resolved, That the MSSNY Council form a search committee to recommend such a lobbyist to the MSSNY within six months; and be it further

Resolved, That such lobbyist will represent solely the interests of the medical profession in the State of New York.

PAST HOUSE ACTION: 81-27 (Not Adopted)

and

Resolution 82-39, Legislative Representatives (Lobbyists)

Introduced by Suffolk County Medical Society

Whereas, The legislative program of the Medical Society of the State of New York over the last 10 to 15 years leaves a great deal to be desired when it comes to passage of meaningful legislation; and

Whereas, Although this lack of success cannot be attributed to any one factor, it is apparent that we must make changes in the manner in which we have conducted our legislative activities; and

Whereas, Successful legislative endeavors involve a great deal of concerted time and effort on the part of those legislative representatives (lobbyists) hired by the Medical Society; and

Whereas, This required concerted effort, in order to be successful, cannot be compromised by having our representatives (lobbyists) working for multiple clients; therefore be it

Resolved, That the Medical Society of the State of New York engage its own full-time legislative representatives (lobbyists) who will work solely for it and have no other clients.

Fiscal Note: Cost to be no more than the annual budget of MSSNY's Division of Government Affairs including what is presently being paid to our lobbyists.

PAST HOUSE ACTION: Resolution 81-27

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⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

Your reference committee was advised that the Medical Society of the State of New York has appointed, and the Council has approved the appointment of an Ad Hoc Committee of the Council on Legislative Affairs to study the specific problems of these resolutions. In view of this, and until the recommendations of the Ad Hoc Committee are finalized and made available for review and action, your reference committee considers that these resolutions would be premature and inappropriate.

⟹ Your reference committee recommends that Resolution 82-15 and Resolution 82-39 not be adopted.

The House amended Resolution 82-15 by the deletion of the word "serious" after the word "toward" in the second resolve. The second resolve of Resolution 82-15 would then read as follows:

Resolved, That MSSNY supplement its efforts in Albany with a lobbyist who will devote his entire energies toward medical issues.

⟹ *. . . The House, after discussion, voted to* **REFER** *Amended Resolution 82-15 and Resolution 82-39 to the Council . . .*

Resolution 82-10, Pireno and Peer Review

Introduced by Medical Society of the County of Westchester, Inc.

Whereas, The United States Supreme Court has ruled that the peer review arrangement between the New York State Chiropractic Association and the Union Labor Life Insurance Company was not exempt from antitrust scrutiny under the McCarran-Ferguson Act; and

Whereas, This decision, Union Labor Life Insurance Co. v. Pireno, must be weighed by each county medical society individually because Pireno exposed every county medical society conducting peer review on behalf of insurance companies to possible antitrust liability; and

Whereas, This "chilling effect" may necessitate the termination of peer review activities; therefore be it

Resolved, That the Medical Society of the State of New York seek legislative redress to grant immunity to professional associations conducting peer review activities from antitrust scrutiny; and be it further

Resolved, That MSSNY work with the AMA to seek enactment of immunity legislation and present this resolution at the Interim Meeting of the AMA in December, 1982.

■

⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

⟹ Your reference committee recommends that Resolution 82-10 be adopted.

⟹ *. . . The House voted to* **ADOPT** *Resolution 82-10 . . .*

Resolution 82-63, Discovery of Quality Assurance Records Through the Freedom of Information Act

Introduced by Broome County Medical Society

Whereas, Two divisions of the State Health Department (the regional Syracuse office and the Board for Professional Medical Conduct) have set precedence by demanding the minutes of the Quality Review meeting of the Broome County Hospital; and

Whereas, It is clear that the Commissioner of Health has broad authority to inspect all hospital records; and

Whereas, At the time of establishment of the Board for Professional Medical Conduct the Legislature took steps to provide immunity for the reporting of misconduct and the furnishing of information in the investigation of such reported misconduct; and

Whereas, These steps were taken to make investigation of professional misconduct move along with the full cooperation of all parties involved who would be assured that their reports and investigations would not be discovered in a subsequent lawsuit, or otherwise made public; and

Whereas, The statutory provisions which forbid discovery in civil suits did not anticipate discovery under the State's Freedom of Information Act (Article 6, Public Officers Law); and

Whereas, The State Health Department may be powerless to prevent disclosure to the public of quality review documents in their possession in response to requests under this act; and

Whereas, Physicians who are already granted statutory immunity for their participation in the peer review system, will now be less willing or unwilling to participate in the peer review process because of the potential for public disclosure; therefore be it

Resolved, That the Medical Society of the State of New York take action through its Committee on State Legislation to review the Freedom of Information Law, and propose suitable legislation that would prevent any information relating to hospital and/or medical quality review obtained by the State Health Department from being disclosed under the Freedom of Information Law; and be it further

Resolved, That the MSSNY go on record that failure to enact such legislation may undermine the entire peer review system which is so vital to quality hospital care in this State.

■

⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

⟹ Your reference committee recommends that Resolution 82-63 be adopted.

⟹ *. . . The House voted to* **ADOPT** *Resolution 82-63 . . .*

Resolution 82-67, Support for the Board for Professional Medical Conduct

Introduced by Section on Neurosurgery

Whereas, The Board for Professional Medical Conduct has worked diligently and effectively to carry out its proper function; and

Whereas, Internal disciplinary action may be uniquely difficult to accomplish at the county medical society level; therefore be it

Resolved, That the Medical Society of the State of New York strongly support the Board for Professional Medical

Conduct in its efforts to monitor and improve the quality of medicine in this State.

■

⟹ Report of the Reference Committee on Governmental Affairs and Legal Matters: The following report was presented by Seymour R. Stall, M.D., *Chairman.*

⟹ Your reference committee recommends that Resolution 82-67 be adopted.

⟹ . . . *The House voted to* **ADOPT** *Resolution 82-67 . . .*

Resolution 82-37, Physician Involvement in the Legislative Program

Introduced by Suffolk County Medical Society

Whereas, It is to the advantage of the Medical Society of the State of New York to encourage and develop a group of physicians interested and knowledgeable about legislative affairs; and

Whereas, It is also valuable to keep the legislative counsel of the MSSNY continually apprised of a breadth of medical opinion; therefore be it

Resolved, That, wherever practical, on each day that the New York State Legislature is in session, the legislative counsel of the Medical Society of the State of New York be accompanied on his or her rounds on Capitol Hill by a member of the Medical Society of the State of New York; and be it further

Resolved, That the Division of Governmental Affairs of the MSSNY take responsibility for organizing this program.

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⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

⟹ Your reference committee recommends that Resolution 82-37 not be adopted.

⟹ . . . *The House voted to* **NOT ADOPT** *Resolution 82-37* . . .

Resolution 82-43, Reactivation of the Committee on Federal Legislation

Introduced by Medical Society of the County of Queens

Whereas, Recent events in Washington, D.C., indicate there is an imminent threat of federal control over the medical profession; and

Whereas, This control will be made possible by increasing the powers of the Federal Trade Commission so as to include the learned professions under the Commission's jurisdiction; and

Whereas, There are changes which will probably affect medicare, medicaid, and other programs for health provisions which will directly affect the practices of our profession; and

Whereas, These threats to the independence of the medical profession and to its right to regulate itself will result in a decrease in the availability and quality of medical care in this country; and

Whereas, The Medical Society of the State of New York's Committee on Federal Legislation has not appeared to have played any part in alerting our membership to this danger; therefore be it

Resolved, That the House of Delegates of the Medical Society of the State of New York instruct the Council to revitalize and reactivate the Committee on Federal Legislation; and be it further

Resolved, That the Board of Trustees be requested to sufficiently budget the Committee on Federal Legislation so as to accomplish the aims of this resolution.

Fiscal Note: $15,000 per annum

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⟹ *Report of the Reference Committee on Governmental Affairs and Legal Matters:* The following report was presented by Seymour R. Stall, M.D., *Chairman.*

⟹ Your reference committee recommends that Resolution 82-43 not be adopted.

⟹ . . . *The House voted to* **NOT ADOPT** Resolution 82-43

BYLAWS

PROPOSED AMENDMENTS TO THE BYLAWS

⟹ *Report of the Reference Committee on Bylaws:* The following report was presented by George Lim, M.D., *Chairman.*

The following items were referred to and considered by the Reference Committee on Bylaws.

These resolutions, together with the minutes of the reference committee hearing, will be forwarded to the House Committee on Bylaws for its consideration and action.

Resolution 82-3, Method of Determining the Number of Councilors For Each District by Physician Membership Count

Introduced by Ninth District Branch

Whereas, Physician population in New York State has increased and distribution has changed over the last three decades; and

Whereas, The present method of determining the number of District Councilors is inequitable; therefore be it

Resolved, That Article IV, Section 1, paragraph 1 of the Bylaws of the Medical Society of the State of New York be amended by the deletion of the word twelve and the insertion of the word fifteen in its place.

Article IV, Section 1, paragraph 1 would then read as follows: (additions italicized, deletions in brackets)

"The Council shall be composed of the president, president-elect, vice-president, immediate past-president, secretary, assistant secretary, treasurer, assistant treasurer, speaker, vice-speaker, chairman of the Board of Trustees, and [twelve] *fifteen* councilors elected by the House of Delegates."

and be it further

Resolved, That Article IV, Section 1 be amended by the insertion of a new paragraph 3 to read as follows: (additions italicized)

"*Physician population based on membership in the county and state society shall determine the number of councilors for each district. One councilor for districts of 1,999 or less physician members; two councilors for districts of 2,000 to 3,999 physician members; three councilors for districts of 4,000 to 7,999 physician members; and four councilors for districts of 8,000 or more physician members, which shall be the maximum allowable per district.*"

and be it further

Resolved, That Article IV, Section 1, paragraph 4 be amended by the deletion of the word four and insertion of the word five before the word councilors. Article IV, Section 1, paragraph 4 would then read as follows: (additions italicized, deletions in brackets)

"[Four] *Five* Councilors shall be elected annually by the House of Delegates, each for a term of three years. In the event of a vacancy, a councilor shall be elected by the Council to serve until the next meeting.

Fiscal Note: $5,000 per year

Explanatory Notes: * District I with 11,705 members shall have four councilors; Districts II, VIII and IX with 3,457, 2,011, and 2,865 members respectively, shall have two councilors; and Districts III, IV, V, VI, VII, with 873, 782, 1,528, 846, and 1,423 respectively, shall have one councilor each.

Should physician population vary considerably in the future, the formula would apply and the Council with the approval of the House of Delegates could change the number of councilors when necessary without a bylaws change.

* Membership figures as of June 30, 1982

Resolution 82-27, Composition of the House of Delegates

Introduced by Bronx County Medical Society

Whereas, Certain members of the House of Delegates have not been duly designated by the membership of the component county medical societies to represent them in the House of Delegates; and

Whereas, These delegates are entitled to vote on issues pertaining to the Bylaws and governing policies of the Medical Society of the State of New York, while not truly representing them as duly designated delegates; and

Whereas, Some of these delegates may represent doctors who are not members of the component county medical societies; therefore be it

Resolved, That the Medical Society of the State of New York amend Article III, Section I, paragraph 1 of the Bylaws to read as follows: (deletions in brackets)

"The House of Delegates shall be composed of: (a) duly designated delegates from the component county medical societies; [(b) officers of the Medical Society of the State of New York, councilors, and trustees; (c) a duly designated delegate from each district branch; (d) a duly designated delegate from each scientific section; (e) duly designated delegates from the student membership; (f) the Commissioner of Health of the State of New York, or a deputy designated by him, provided that any representative shall be a member of the State Society; (g) past-presidents of the State Society and any past-president of the American Medical Association, provided that individual is a member of the Medical Society of the State of New York who shall be members for life; and (h) a representative from each of the medical schools in New York State, provided said representative is a member of the Medical Society of the State of New York."]

and be it further

Resolved, That Article III, Section 1, paragraphs 4 and 6 of the Bylaws be amended to read as follows: (deletions in brackets)

"The term of a delegate duly designated by a component county medical society, [district branch, scientific section, or medical school] shall begin at the first annual meeting of the House of Delegates subsequent to his designation.

"The student members of each medical school in New York State shall, at least sixty days prior to the annual meeting of the House of Delegates of the Medical Society of the State of New York, elect two members from among their number to represent them at the business meeting of the student members which shall be held immediately prior to the convening of the House of Delegates. At such meeting the representatives shall elect a chairman, vice-chairman, secretary, [delegates, and alternate delegates. The medical student membership shall be entitled to one delegate and one alternate delegate, and according to the rolls of the Medical Society of the State of New York, sixty days prior to the annual meeting, one additional delegate for each additional 400 student members, up to a maximum of 3 delegates.] No member shall hold more than one such office. The chairman, vice-chairman, and secretary shall conduct the business meeting [and the delegates and the alternate delegates shall represent the student members at the first annual meeting of the House of Delegates subsequent to their designation."]

NOTE: This change also affects:

Article III, Section 3, paragraph 4
Article V, Section 2, Speaker (third sentence)
Article XII, Section 1, paragraphs 1 and 4
Article XVI, paragraph 4
Article XVIII, Section 3, paragraphs 1 and 3

Resolution 82-33, Specialty Society Representation in the Medical Society of the State of New York

Introduced by Medical Society of the County of Queens, Inc.

Whereas, The present system of specialty society representation in MSSNY has become outmoded; and

Whereas, The present method of selecting officers of specialty sections and delegates from the sections has become slipshod and has even resulted in poorer, rather than better, specialty society representation; and

Whereas, The Scientific Program Committee has found that the present system has resulted, in many instances, in inefficient, cumbersome, and amateurish attempts to produce quality CME programs; and

Whereas, It is desirable that the specialty societies and MSSNY continue to cooperate on behalf of the total medical profession and that the specialties continue to have official representation in the House of Delegates of the Medical Society of the State of New York; and

Whereas, To improve specialty society representation in the House of Delegates and to insure more efficient specialty society cooperation in the preparation of the programs for the Annual CME Assembly, certain amendments to the Bylaws will be required; therefore be it

Resolved, That the Bylaws of the Medical Society of the State of New York be amended so as to abolish the sections and to permit the Council to draw up a list of approved specialty societies each one of which would then be entitled to select a delegate and an alternate delegate to the MSSNY House of Delegates; and be it further

Resolved, That each approved specialty society be requested to recommend a representative to serve as a member of the Scientific Program Committee of MSSNY; and be it further

Resolved, That the following amendments to the Bylaws be approved by the House of Delegates to accomplish the purpose of the above resolution; and be it further

Resolved, That Article III, Section 1, paragraph 1 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

The House of Delegates shall be composed of: (a) duly designated delegates from the component county medical societies; (b) officers of the Medical Society of the State of New York, councilors, and trustees; (c) a duly designated delegate from each district branch; (d) a duly designated delegate from each [scientific section] *approved specialty society;* (e) duly designated delegates from the student membership; (f) the Commissioner of Health of the State of New York, or a deputy designated by him, provided that any representative shall be a member of the State Society; (g) past-presidents of the State Society and any past president of the American Medical Association, provided that individual is a member of the Medical Society of the State of New York who shall be members for life; and (h) a representative from each of the medical schools in New York State, provided said representative is a member of the Medical Society of the State of New York.

and be it further

Resolved, That Article III, Section 1, paragraph 4 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

The term of a delegate duly designated by a component county medical society, district branch, [scientific section] *specialty society* or medical school shall begin at the first annual meeting of the House of Delegates subsequent to his designation.

and be it further

Resolved, That Article III, Section 2, paragraph 6 of the Bylaws be amended to read as follows: (deletions in brackets)

It shall provide for [a division of the scientific work of the Medical Society of the State of New York into appropriate sections, for] the organization of the district branches; for rules and regulations for its own government, and for the administration of the affairs of the State Society.

and be it further

Resolved, That Article III, Section 3 of the Bylaws be amended by deleting paragraph 2 (deletions in brackets)

[Such annual meetings may be held during the annual convention of the Medical Society of the State of New York though this is not required.]

and be it further

Resolved, That Article XII of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

[SECTIONS AND SESSIONS]
SPECIALTY SOCIETY REPRESENTATION

[As designated by the House of Delegates, there shall be sections devoted to the scientific work of the Medical Society of the State of New York and sessions devoted to the scientific, cultural, historical, or economic subjects. Both sections and sessions shall meet during the annual convention of the State Society, under the supervision of the Council.]

[SECTION 1. SECTIONS]

The House of Delegates shall designate those [scientific sections] *specialty societies* entitled to representation in the Medical Society of the State of New York. Such [sections] *specialty societies* shall correspond to the Statewide specialty societies recognized by the Council of the Medical Society of the State of New York. [These scientific sections designated by the House of Delegates shall organize at their annual meeting by the election of officers. Officers to be elected shall include a chairman, a vice-chairman, a secretary, and a delegate to the House of Delegates. The chairman, vice-chairman, secretary, and delegate must be members of both the Statewide specialty societies and the Medical Society of the State of New York and shall be elected for one year terms with the exception of the secretary who shall be elected for such term as the section may deem desirable.]

Each of the Statewide specialty societies recognized by the Council of the Medical Society of the State of New York shall be requested to submit to the office of the Executive Vice-President the name of one nominee for [each office of their corresponding sections] *delegate and one for alternate delegate* not less than ninety days prior to the [sections] annual [business] meeting *of the House of Delegates.* [Such nominees shall be voted on, together with all other nominees submitted, at the annual business meeting of the section.] All such nominees must be members of the Medical Society of the State of New York.

[To participate in the election of any section, a member of the Medical Society of the State of New York must be registered with such section.]

Should the delegate *or alternate* of a [scientific section] *specialty society* be unable to serve in the House of Delegates, the [chairman] *president,* of the [section] *specialty society* shall designate a substitute delegate and shall so notify the secretary of the Medical Society of the State of New York in writing.

[The officers of the various sections shall prepare programs for their section under the direction and subject to the approval of the Council.]

[No new section shall be created by the House of Delegates unless a session devoted to its subject matter or specialty shall have been held at at least two successive annual conventions.]

[SECTION 2. SESSIONS]

[A session shall be a single meeting of a group to discuss scientific, cultural, historical, or economic subjects, under the direction and subject to the approval of the Council.]

[Each session shall have a chairman and a secretary who shall be appointed by the president with the approval of the Council.]

The Scientific Program Committee shall be responsible for planning and presenting the program at the Annual Continuing Medical Education Assembly which shall be held at a time and place designated by the Council. The Committee shall be composed of a chairman and associate chairmen appointed annually by the President of the Medical Society of the State of New York with the approval of the Council. It shall also be composed of one MSSNY member appointed by each of the specialty societies approved by the Council as provided in Article XII, paragraph 1 of these Bylaws.

and be it further

Resolved, That Article XIII, Section 1 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

SECTION 1. ANNUAL [CONVENTION] MEETING
OF THE HOUSE OF DELEGATES

There shall be an annual [convention] *meeting of the House of Delegates* of the Medical Society of the State of New York to be held at a time and place designated by the House of Delegates or by the Council.

[This convention shall include the annual scientific program which shall include the annual meetings of the sections and sessions, scientific motion pictures, and exhibits, and such other activities and presentations as the House of Delegates or Council may direct.]

[The annual meetings of the Medical Society of the State of New York and the House of Delegates may or may not be held at such convention pursuant to the provisions of Article III, Section 3 of these Bylaws.]

and be it further

Resolved, That Article XIII, Section 4, paragraphs 1, 4, 5, 6, and 8 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

The notices of the annual [convention] *meeting of the House of Delegates* and annual and special meetings of the Medical Society of the State of New York shall state the date, place, and hour and shall be mailed postpaid to each member by first class mail not less than ten nor more than fifty days before a meeting.

Each member in attendance at the annual [convention] *meetings* of the Medical Society of the State of New York shall enter his name and the name of the component county medical society to which he belongs in a register to be kept by the secretary of the State Society for that purpose. No member shall take part in any of the proceedings of such meetings until he shall have complied herewith.

All members in good standing so registered may attend and participate in the proceedings and discussions of the [scientific meetings] *Annual Continuing Medical Education Assembly* of the Medical Society of the State of New York [and of the sections and sessions.]

[A distinguished physician of a foreign country or a physician not a resident of this State who is a member of his own state medical association may become a guest during any annual convention upon the invitation of the president or officers of the Medical Society of the State of New York, and may be accorded the privilege of participating in all the scientific programs of the convention.]

All papers read before the Medical Society of the State of New York at its annual [convention by its members] *Continuing Medical Education Assembly* shall become the property of the State Society. Whenever such paper shall be deemed not acceptable for publication in the New York State Journal of Medicine it shall be returned to the author as promptly as possible after its receipt in the publication office of the State Society.

Resolution 82-35, Delegate Representing the Resident Membership at the Annual Meeting of the House of Delegates of the Medical Society of the State of New York

Introduced by George L. Collins, Jr., M.D., as an Individual

Whereas, Resolution 80-31, as amended, was adopted by the House of Delegates at its annual meeting in 1981; and

Whereas, The adoption of Resolution 80-31 has created a resident membership within the Medical Society of the State of New York; and

Whereas, There are currently in excess of 300 resident members in good standing with the Medical Society of the State of New York; and

Whereas, The Bylaws of the MSSNY do not currently provide the resident membership with a delegate to represent them at the House of Delegates of the MSSNY; and

Whereas, This has resulted in an inequitable situation, particularly since the student membership is entitled to be represented by up to (3) delegates under Article III of the Bylaws of the MSSNY; therefore be it

Resolved, That Article III, Section 1, paragraph 1 of the Bylaws of the Medical Society of the State of New York be amended by adding the words "and (i) a delegate representing the resident membership."

Article III, Section 1, paragraph 1 would then read as follows: (additions italicized)

"The House of Delegates shall be composed of: (a) duly designated delegates from the component county medical societies; (b) officers of the Medical Society of the State of New York, councilors, and trustees; (c) a duly designated delegate from each district branch; (d) a duly designated delegate from each scientific section; (e) duly designated delegates from the student membership; (f) the Commissioner of Health of the State of New York, or a deputy designated by him, provided that any representative shall be a member of the State Society; (g) past-presidents of the State Society and any past president of the American Medical Association, provided that individual is a member of the Medical Society of the State of New York who shall be members for life; (h) a representative from each of the medical schools in New York State, provided said representative is a member of the Medical Society of the State of New York; *and (i) a delegate representing the resident membership.*"

and be it further

Resolved, That Article III, Section 1 be amended by adding a new paragraph 7 to read as follows: (additions italicized)

"The resident membership shall be entitled to elect one delegate to the House of Delegates. The method of electing the resident membership delegate shall be determined by the Council."

Resolution 82-36, Hospital Medical Staff Delegate to the House of Delegates of the Medical Society of the State of New York

Introduced by Milton Rosenberg, M.D., as an Individual

Whereas, A recent study of the American Medical Association* found that an increasing number of physicians are entering full-time and part-time contractual arrangements with hospitals; and

Whereas, This same AMA study stated:

"No other element of the health care delivery system is likely to be more crucial or more subject to forced change than the relationship between physicians, hospitals, and other health facilities. The medical staffs of these health care institutions need support from the federation if they are to retain their leadership roles and to be an effective unit in shaping their future relationships with hospitals and other health care facilities."; and

Whereas, There is a growing recognition of the need to provide hospital medical staff representation in organized medicine so that the major issues affecting physicians in hospital medical staffs can be adequately addressed; and

Whereas, The House of Delegates of the American Medical Association has appointed a Study Committee to address the possible need for a Section on Medical Staffs; and

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* Final Report on Hospital/Health Facility Medical Staffs, 1982 Prepared by the AMA Hospital/Health Facility Medical Staffs Task Force

Whereas, The Idaho Medical Association has recently amended its Bylaws to provide for a hospital medical staff section; therefore be it

Resolved, That the Medical Society of the State of New York amend its Bylaws to include a new Article XII-b to provide a hospital medical staff section to read as follows: (additions italicized)

"The Hospital Medical Staff Section is authorized to be represented in the House of Delegates by (1) delegate. The Hospital Medical Section shall represent physicians on the medical staffs of acute care hospitals located in New York State.";

and be it further

Resolved, That Article XII-b include a second paragraph to provide as follows: (additions italicized)

"The method of electing the delegate representing the Hospital Medical Staff Section shall be determined by the Council."

Resolution 82-47, Change From Specialty Section to Specialty Society Representation in the MSSNY House of Delegates

Introduced by Council of the Medical Society of the State of New York

Whereas, The Committee on Research and Development has determined specialty societies could be better represented by direct representation in the House of Delegates rather than the present method of representation by scientific section; and

Whereas, The Scientific Program Committee had come to the same conclusion that there is no longer a need for the specialty sections in the Medical Society of the State of New York, however, it is necessary that the specialty societies and MSSNY continue to cooperate on behalf of the total medical profession and that these societies continue to have representation in the MSSNY House of Delegates; therefore be it

Resolved, That the Medical Society of the State of New York abolish representation by scientific sections and change the Bylaws of the MSSNY to provide for direct representation of specialty societies in the House of Delegates; and be it further

Resolved, That the Bylaws be amended to accommodate this change; and be it further

Resolved, That Article III, Section 1, paragraph 1 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

The House of Delegates shall be composed of: (a) duly designated delegates from the component county medical socieites; (b) officers of the Medical Society of the State of New York, councilors, and trustees; (c) a duly designated delegate from each district branch; (d) a duly designated delegate from each [scientific section] *recognized specialty society;* (e) duly designated delegates from the student membership; (f) the Commissioner of Health of the State of New York, or a deputy designated by him, provided that any representative shall be a member of the State Society; (g) past-presidents of the State Society and any past president of the American Medical Association, provided that individual is a member of the Medical Society of the State of New York who shall be members for life; and (h) a representative from each of the medical schools in New York State, provided said representative is a member of the Medical Society of the State of New York.

and be it further

Resolved, That Article III, Section 1, paragraph 4 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

The term of a delegate duly designated by a component county medical society, district branch, [scientific section] *specialty society* or medical school shall begin at the first annual meeting of the House of Delegates subsequent to his designation.

and be it further

Resolved, That Article III, Section 2, paragraph 6 of the Bylaws be amended to read as follows: (deletions in brackets)

It shall provide for [a division of the scientific work of the Medical Society of the State of New York into appropriate sections, for] the organization of the district branches; for rules and regulations for its own government, and for the administration of the affairs of the State Society.

and be it further

Resolved, That Article III, Section 3 of the Bylaws be amended by deleting paragraph 2 (deletions in brackets)

[Such annual meetings may be held during the annual convention of the Medical Society of the State of New York though this is not required.]

and be it further

Resolved, That Article XII of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

[SECTIONS AND SESSIONS]
SPECIALTY SOCIETY REPRESENTATION

[As designated by the House of Delegates, there shall be sections devoted to the scientific work of the Medical Society of the State of New York and sessions devoted to the scientific, cultural, historical or economic subjects. Both sections and sessions shall meet during the annual convention of the State Society, under the supervision of the Council.]

[SECTION 1. SECTIONS]

The House of Delegates shall designate those [scientific sections] *specialty societies* entitled to representation in the Medical Society of the State of New York. Such [sections] *specialty societies* shall correspond to the Statewide specialty societies recognized by the Council of the Medical Society of the State of New York. [These scientific sections designated by the House of Delegates shall organize at their annual meeting by the election of officers. Officers to be elected shall include a chairman, a vice-chairman, a secretary, and a delegate to the

House of Delegates. The chairman, vice-chairman, secretary, and delegate must be members of both the Statewide specialty societies and the Medical Society of the State of New York and shall be elected for one year terms with the exception of the secretary who shall be elected for such term as the section may deem desirable.]

Each of the Statewide specialty socieites recognized by the Council of the Medical Society of the State of New York shall be requested to submit to the office of the Executive Vice-President the name of one nominee for [each office of their corresponding sections] *delegate and one for alternate delegate* not less than ninety days prior to the [sections] annual [business] meeting *of the House of Delegates*. [Such nominees shall be voted on, together with all other nominees submitted, at the annual business meeting of the section.] All such nominees must be members of the Medical Society of the State of New York.

[To participate in the election of any section, a member of the Medical Society of the State of New York must be registered with such section.]

Should the delegate *or alternate* of a [scientific section] *specialty society* be unable to serve in the House of Delegates, the [chairman] *president* of the [section] *specialty society* shall designate a substitute delegate and shall so notify the secretary of the Medical Society of the State of New York in writing.

[The officers of the various sections shall prepare programs for their section under the direction and subject to the approval of the Council.]

[No new section shall be created by the House of Delegates unless a session devoted to its subject matter or specialty shall have been held at at least two successive annual conventions.]

[SECTION 2. SESSIONS]
[A session shall be a single meeting of a group to discuss scientific, cultural, historical, or economic subjects, under the direction and subject to the approval of the Council.]

[Each session shall have a chairman and a secretary who shall be appointed by the president with the approval of the Council.]

The Scientific Program Committee shall be responsible for planning and presenting the program at the Annual Continuing Medical Education Assembly which shall be held at a time and place designated by the Council. The Committee shall be composed of a chairman and associate chairmen appointed annually by the President of the Medical Society of the State of New York with the approval of the Council. It shall also be composed of one MSSNY member appointed by each of the specialty societies approved by the Council as provided in Article XII, paragraph 1 of these Bylaws.

and be it further

Resolved, That Article XIII, Section 1 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

SECTION 1. ANNUAL [CONVENTION] *MEETING OF THE HOUSE OF DELEGATES*

There shall be an annual [convention] *meeting of the House of Delegates* of the Medical Society of the State of New York to be held at a time and place designated by the House of Delegates or by the Council.

[This convention shall include the annual scientific program which shall include the annual meetings of the sections and sessions, scientific motion pictures, and exhibits, and such other activities, and presentations as the House of Delegates or Council may direct.]

[The annual meetings of the Medical Society of the State of New York and the House of Delegates may or may not be held at such convention pursuant to the provisions of Article III, Section 3 of these Bylaws.]

and be it further

Resolved, That Article XIII, Section 4, paragraphs 1, 4, 5, 6, and 8 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

The notices of the annual [convention] *meeting of the House of Delegates* and annual and special meetings of the Medical Society of the State of New York shall state the date, place, and hour and shall be mailed postpaid to each member by first class mail not less than ten nor more than fifty days before a meeting.

Each member in attendance at the annual [convention] *meetings* of the Medical Society of the State of New York shall enter his name and the name of the component county medical society to which he belongs in a register to be kept by the secretary of the State Society for that purpose. No member shall take part in any of the proceedings of such meetings until he shall have complied herewith.

All members in good standing so registered may attend and participate in the proceedings and discussions of the [scientific meetings] *Annual Continuing Medical Education Assembly* of the Medical Society of the State of New York [and of the sections and sessions.]

[A distinguished physician of a foreign country or a physician not a resident of this State who is a member of his own state medical association may become a guest during any annual convention upon the invitation of the president or officers of the Medical Society of the State of New York, and may be accorded the privilege of participating in all the scientific programs of the convention.]

All papers read before the Medical Society of the State of New York at its annual [convention by its members] *Continuing Medical Education Assembly* shall become the property of the State Society. Whenever such paper shall be deemed not acceptable for publication in the New York State Journal of Medicine it shall be returned to the author as promptly as possible after its receipt in the publication office of the State Society.

Resolution 82-49, Members of the Council Serving on the Board of Directors of the Medical Liability Mutual Insurance Company

Introduced by Section on Surgery

Whereas, The single most important issue facing physicians in this State concerns the availability and cost of professional medical liability insurance; and

Whereas, The Medical Liability Mutual Insurance Company, although established by the Medical Society of the State of New York, is a separate corporation whose actions are governed by its own Board of Directors; and

Whereas, The decisions made by the Company's Board are legally required to be made in the best interests of the corporate entity even if those interests are not consonant with the best interests of its physician insureds; and

Whereas, The best interests of the physicians should be effectuated by the Medical Society of the State of New York through the House of Delegates or the Council; and

Whereas, There are numerous occasions when the interests of physician members of the Medical Society of the State of New York will be at variance with those of the Insurance Company; and

Whereas, A substantial number of the members of the Council of the Society sit on the Board of Directors; and

Whereas, This situation, if not actually constituting a conflict of interest, at the very least gives the appearance of such a conflict; and

Whereas, Irrespective of this situation, there remains a need for a liaison between the Council of the Society and the Board of Directors of the Company; therefore be it

Resolved, That the Bylaws of the Medical Society of the State of New York be amended to provide that no more than three (3) members of the Council concurrently sit on the Board of Directors of the Medical Liability Mutual Insurance Company; and be it further

Resolved, That the Bylaws of the Medical Society of the State of New York be amended to add a new paragraph at the end of Article IV, Section 1, thereof to read as follows: (additions italicized)

"*No more than three members of the Council shall concurrently serve on the Board of Directors of the Medical Liability Mutual Insurance Company. If a member is elected to the Board of Directors of the Medical Liability Mutual Insurance Company at a time when three existing members of the Council are also serving as Directors, said member of the Council shall either decline the directorship to which he was just elected or, in the alternative, resign his position as a member of the Council. Should an individual member of the Board of Directors of the Medical Liability Mutual Insurance Company be elected as a member of the Council to the Medical Society of the State of New York at a time in which three existing members of the Council were current members of the Board of Directors, said individual would either resign as a member of the Board of Directors or decline to serve in the position of member of the Council.*"

Resolution 82-71, Life Membership

Introduced by Section on Psychiatry

Whereas, The method of determining life membership has met with some dissatisfaction from members of the Medical Society of the State of New York; and

Whereas, A more direct method would satisfy the membership; therefore be it

Resolved, That the Medical Society of the State of New York amend Article II, Section I, paragraph 6 of the Bylaws to read as follows: (additions italicized, deletions in brackets)

"An active member in good standing [who has completely withdrawn from active practice of medicine and who has been a member in good standing for ten consecutive years prior to the attainment of the age of seventy years or an active member in good standing who continues the active practice of medicine and who has been a member in good standing for the ten consecutive years prior to the attainment of the age of seventy-five years, or] *shall be eligible for life membership and exempt from paying dues and assessments when the sum of the member's years of active membership plus the member's age at the start of the fiscal year shall equal 100.* An active member in good standing for ten consecutive years or more who is permanently disabled, may apply for life membership. The House of Delegates or the Council may waive the requirements in a proper case where there appear to be extenuating circumstances. He shall apply for such life membership to the component county medical society of which he is a member. His application shall be governed by the constitution and bylaws of the component county medical society relative to active membership."

Resolution 82-34, Life Membership

Introduced by Medical Society of the County of Monroe, Inc.

Whereas, The Medical Society of the State of New York amended its Bylaws in 1978 concerning life membership; and

Whereas, The Medical Society of the County of Monroe, Inc., in considering the changes in the MSSNY life membership category, believes there is no justifiable reason why a physician, who has been an active member in good standing for ten consecutive years should not be entitled to life membership upon retirement at the age of 65 rather than 70; and

Whereas, The Monroe County Medical Society also believes there is no justifiable reason why a physician who has been an active member in good standing for ten consecutive years and continues to practice should not be entitled to life membership at age 70 rather than 75; therefore be it

Resolved, That Article II, Section I, paragraph 6 of the Bylaws of the Medical Society of the State of New York be amended by deleting the words "seventy" and "seventy-five" and substituting the words "sixty-five" and "seventy," respectively.

Article II, Section I, paragraph 6 would then read as follows: (additions italicized, deletions in brackets)

"An active member in good standing who had completely withdrawn from the active practice of medicine and who has been a member in good standing for the ten consecutive years prior to the attainment of the age of [seventy] *sixty-five* years or an active member in good standing who continues the active practice of medicine and who has been a member in good standing for the ten consecutive years prior to the attainment of the age of [seventy-five] *seventy* years, or an active member in good standing for ten consecutive years or more who is permanently disabled, may apply for life membership. The House of Delegates or the Council may waive the requirements in a proper case where there appear to be extenuating circumstances. He shall apply for such life membership to the component county medical society of which he is a member. His application shall be governed by the constitution and bylaws of the component county medical society relative to active membership."

NOTE: This resolution is based on our experience that indicates that physicians no longer remain in active practice until disability or death occurs. This resolution takes into account that many hospital bylaws require retirement at age 65. Lastly, this resolution speaks to the loyalty and years of contributing dues dollars to organized medicine to support the gesture of granting life membership at age 65 for those who retire, as opposed to the purely fiscal note that MSSNY staff attach to this and related resolutions. While their data is accurate, it reflects a one-time painful adjustment, and, in our opinion, will eventually increase membership and will get rid of the numerous problems that arise on an annual basis when a physician is confronted with our unreasonable criteria for life membership

At the reference committee hearing, the Medical Society of the County of Monroe, sponsor of Resolution 82-34, Life Membership, requested that the resolution be withdrawn since Resolution 79-39 was approved by the House of Delegates at this session.

On the floor of the House, the Medical Society of the County of Monroe requested that Resolution 82-34 not be withdrawn.

A motion was introduced to amend Resolution 82-34 by the addition of the following resolve:

Resolved, That the enactment of this resolution establish a $50 per year annual dues for all life members, unless waived by extenuating circumstances.

⟹ . . . The House approved the amendment to Resolution 82-34 . . .

⟹ . . . *The House voted to* ***ACCEPT*** *the amended report of the Reference Committee on Bylaws for information and refer it to the House Committee on Bylaws . . .*

Annual Meeting of the Medical Society of the State of New York

. . . The Speaker adjourned the House of Delegates on Wednesday, November 10, 1982, and President Rosenberg called the annual meeting of the Medical Society of the State of New York to order . . .

. . . President Rosenberg introduced President-Elect Richard D. Eberle who addressed the House (See Addresses to the House, page 427) . . .

. . . President Rosenberg adjourned the annual meeting . . .

ELECTIONS

Tellers

Tellers were the following:
James R. Nunn, Erie, *Chairman*
Daniel L. Dombroski, Onondaga
Joseph J. Kaufman, Wayne
Seymour J. Wiener, Orange

Nominations

. . . Speaker Clowe introduced Ralph M. Schwartz, M.D., Chairman, who presented the report of the Nominating Committee. Nominations from the floor are indicated by a double asterisk. . .

President
Richard D. Eberle, Onondaga
President-Elect
Bernard J. Pisani, New York
Vice-President
Allison B. Landolt, Westchester
Secretary
Victor J. Tofany, Monroe
Assistant Secretary
Daniel F. O'Keeffe, Warren
Treasurer
John A. Finkbeiner, New York
Assistant Treasurer
Charles D. Sherman, Jr., Monroe
Speaker
John L. Clowe, Schenectady
Vice-Speaker
Charles N. Aswad, Broome

Trustee (*one for five years*)
Ralph M. Schwartz, Kings

Trustee (*one for two years*)
Joseph F. Shanaphy, Richmond

Councilors (*four for three years*)
James H. Cosgriff, Jr., Erie
Samuel M. Gelfand, Nassau
Richard A. Hughes, Warren
Antonio F. LaSorte, Broome

Delegates to the AMA
Charles N. Aswad, Broome
Edgar P. Berry, New York
William P. Clark, Westchester
John L. Clowe, Schenectady
Richard D. Eberle, Onondaga
Carl Goldmark, Jr., New York
Robert E. Gordon, Kings
Wilbur J. Gould, New York
Joseph J. Kaufman, Wayne
James J. Kropelin, Niagara
Dattatraya Lanjewar, The Bronx
Robert A. Mayers, Westchester
Richard N. Pierson, Jr., New York
Milton Rosenberg, Suffolk
Felix R. Rosenhain, Queens
Charles R. Salamone, Monroe
Wallace Salter**
Ralph M. Schwartz, Kings
Joseph F. Shanaphy, Richmond
Clifford L. Spingarn, New York
Stanley A. Steckler, Suffolk
George T. C. Way, Dutchess**

. . . The nominees for president-elect, vice-president, secretary, assistant secretary, treasurer, assistant treasurer, speaker, vice-speaker, councilors (four for three years), trustee (one for five years), and trustee (one for two years) were unopposed and were elected by a single ballot, cast by the secretary.

** Nomination from the floor

Balloting

. . . Assistant Secretary Landolt called the roll of members of the House who had registered to vote as follows:

OFFICERS, COUNCILORS, TRUSTEES

Milton Rosenberg
Richard D. Eberle
Bernard J. Pisani
Victor J. Tofany
Allison B. Landolt
John A. Finkbeiner
Charles D. Sherman, Jr.
John L. Clowe
William P. Clark
Charles N. Aswad
Kenneth H. Eckhert
Daniel F. O'Keeffe
John H. Carter
Morton M. Kurtz
Robert A. Mayers
Stanley A. Steckler
Edgar P. Berry
James M. Flanagan
George Lim
M. Theodore Tanenhaus
Arthur H. Diedrick
Paul M. DeLuca
George L. Collins, Jr.
G. Rehmi Denton
Carl Goldmark, Jr.
Joseph F. Shanaphy

PAST-PRESIDENTS

Henry I. Fineberg
Norman S. Moore
Walter T. Heldmann
Edward Siegel
George T. C. Way
Ralph M. Schwartz

PAST PRESIDENT OF AMA

Gerald D. Dorman

COMMISSIONER, NEW YORK STATE DEPARTMENT OF HEALTH

DISTRICT DELEGATES (9)

Sheppard Arluck
Duane M. Cady
Frederic W. Holcomb, Jr.*
Richard A. Hughes
B. Basil Hyman
Vincent I. Maddi
John A. Ostuni

SECTION DELEGATES (27)

Ralph Altman
Thomas J. Doyle
Franklin S. Glickman
Gerald L. Haines*
Max N. Howard
Russell C. Johnson
Robert M. Kohn
Fouad B. Michael
Edward M. Nathan*
James R. Nunn
Arthur Q. Penta
Frank J. Piper*
Lawrence Ravich
Charles R. Salamone
Edward C. Sinnott
John D. States
Martin C. Ushkow

DELEGATES FROM COMPONENT COUNTY SOCIETIES

Albany (4)
John W. Abbuhl
Nathan P. Reed
Allegany (1)
Muhammad A. Khan
Bronx (12)
Uriel Adar*
John P. Albanese
Marcos A. Charles
William G. Chorba*
Dattatraya G. Lanjewar
Michael N. Lavacca
Charles Laverdi
George W. Pelebecky*
Juana Toporovsky*
Broome (4)
John K. Garan*
Louis W. Giordano
Theodore R. Poritz
John F. Spring

Cattaraugus (1)
Ruth R. Knobloch

Cayuga (1)
Richard J. Freeman

Chautauqua (2)
James G. Dahlie*
George W. Lewis

Chemung (2)
Gerald P. Schneider
Edward F. Steele

Chenango (1)
Norman C. Lyster, Jr.

Clinton (1)

Columbia (1)

Cortland (1)
Nicholas J. Gabriel

Delaware (1)
Glen Joshpe

Dutchess (3)
Stephen R. Chernay
Francis J. McMahon*
Seymour R. Stall

Erie (9)
Victorino Anllo
Frank J. Bolgan
James H. Cosgriff, Jr.
Anthony J. Federico
George W. Fugitt
Edmond J. Gicewicz
James F. Phillips, Jr.
Joseph A. Prezio

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* See summary for substitution for delegates

- *Essex* (1)
- *Franklin* (1)
  - Alfred A. Hartmann, Sr.
- *Fulton* (1)
  - Armand J. D'Errico
- *Genesee* (1)
- *Greene* (1)
- *Herkimer* (1)
  - Krishna K. Vadlamudi
- *Jefferson* (2)
  - Frederic A. Stone
- *Kings* (22)
  - Leslie L. Alexander
  - Grace A. Altenau
  - Joseph R. Brennan
  - George W. Calvosa
  - Vernal G. Cave
  - Duncan W. Clark
  - Philip Cohen
  - Vashti R. C. Curlin
  - Stanley I. Fishman
  - Robert E. Gordon
  - Benjamin E. Lanier*
  - Nicholas T. Leone*
  - A. W. Martin Marino, Jr.
  - Bentley D. Merrim
  - Harold N. Schwinger
  - John H. Shelley*
  - Leo J. Swirsky
- *Lewis* (1)
  - John C. Herrman
- *Livingston* (1)
  - Nadene D. Hunter*
- *Madison* (1)
  - Leonard A. Argentine*
- *Monroe* (7)
  - Ronald C. Bruce
  - William A. Dolan
  - Nathaniel J. Hurst
  - William A. Kern, Jr.
  - Joyce M. McChesney
  - Charles J. Vacanti*
  - Sidney S. Weinstein*
- *Montgomery* (1)
  - Feori F. Pipito
- *Nassau* (12)
  - Harry F. Abe
  - Joseph I. Cohn*
  - Ray S. Crampton
  - Samuel M. Gelfand
  - Waldemar F. Hermann
  - Lawrence S. Kryle*
  - Paul C. Lehmuller
  - Sidney Mishkin
  - Felix A. Monaco
  - Patricia G. Squillace
  - Walter A. Trenkle
  - Jerome Zwanger
- *New York* (22)
  - Robert S. April*
  - Melvin H. Becker
  - David M. Benford
  - Robert S. Bernstein
  - Irwin J. Cohen
  - Hugh C. Davidson, Jr.
  - Solomon Fisch*
  - George Hyams
  - Charles S. LaMonte
  - Vance Lauderdale, Jr.
  - Aaron G. Meislin
  - George W. Melcher, Jr.
  - Richard B. Nolan
  - Donna B. O'Hare
  - Stuart I. Orsher
  - Richard N. Pierson, Jr.
  - Edward W. Powers, III*
  - William B. Rawls
  - Miriam Z. Seborer
  - Clifford L. Spingarn
  - Meyer Texon
  - Jerome Weiss
- *Niagara* (3)
  - Theodore C. Gerwig, Jr.
  - James J. Kropelin
- *Oneida* (3)
  - Clarke T. Case
  - Gerald C. Gant*
  - Robert M. George
- *Onondaga* (5)
  - Richard A. Konys
  - Carl E. Marlow
  - David L. Poushter
  - John T. Prior
  - George P. Tilley
- *Ontario* (2)
  - Thomas A. McCormick
  - Kenneth T. Steadman
- *Orange* (4)
  - Jack Manpel*
  - Ansel R. Marks
  - Albert A. Mazzeo
  - Seymour J. Wiener
- *Orleans* (1)
  - Antoine A. Nassar
- *Oswego* (1)
  - James F. Grant
- *Otsego* (1)
  - Rodman D. Carter
- *Putnam* (1)
- *Queens* (16)
  - John W. V. Cordice
  - Alexander M. De la Garza
  - Robert M. Farrell
  - Fred N. Flatau
  - Leo Arthur Green
  - Victor Guarneri
  - Edith Gutman
  - Joseph Klements
  - Nicetas H. Kuo
  - Hilda Ratner
  - Nessim J. Romano*
  - Felix R. Rosenhain
  - Morton M. Safran
  - Ralph E. Schlossman
  - Lester R. Tuchman
  - Ezra A. Wolff
- *Rensselaer* (2)
  - Thomas D. Pemrick
  - William A. Whyland
- *Richmond* (3)
  - Gerald J. Lustig
  - Robert J. O'Connor
  - William A. Schwarz
- *Rockland* (4)
  - Roy H. Lieberman
  - Stanley H. Oransky
- *St. Lawrence* (1)
  - Maurice J. Elder
- *Saratoga* (1)
- *Schenectady* (3)
  - Richard H. Lange
  - John M. Spring
  - Donald Wexler*
- *Schoharie* (1)
  - Frederick J. Michel
- *Schuyler* (1)
- *Seneca* (1)
  - Donald W. Bidwell
- *Steuben* (2)
  - Jack D. O'Neil
- *Suffolk* (11)
  - William H. Bloom
  - Stephen I. Braitman
  - Clive D. Caplan
  - Frank R. Collier
  - John G. Egner
  - Robert E. Fear
  - Phillip I. Levitan
  - Nathaniel B. Messinger
  - Frank H. Russell, Jr.
  - Melvin Shuter
  - Jerry A. Wider
- *Sullivan* (1)
- *Tioga* (1)
- *Tompkins* (2)
  - E. James Fogel, Jr.
  - Robert S. Perry
- *Ulster* (2)
  - John A. Cooke, Jr.
- *Warren* (2)
  - Larry J. Greenberg*
  - Raymond A. Maddocks*
- *Washington* (1)
  - Michael J. Lynch
- *Wayne* (1)
  - Joseph J. Kaufman*
- *Westchester* (9)
  - Edwin I. Cleveland
  - Peter B. Farnsworth
  - Richard L. Fenton
  - Armond V. Mascia
  - Stanley M. Mendelowitz
  - Richard L. Petrillo
  - John A. Ramsdell
  - Thomas Dignan Rizzo
  - Michael Sierp
- *Wyoming* (1)
- *Yates* (1)
  - John E. Horn

MEDICAL SCHOOL DELEGATES (12)

- Thomas E. Cardillo
- Daniel L. Dombroski
- Joseph Theobald Doyle
- Jack Richard
- Stanford Wessler
- Tamarath Knigin Yolles

MEDICAL STUDENT DELEGATES (3)

- Mark Levitan
- Theodore Marc Mazer
- Robin Tapper

* See summary for substitution for delegates

SUMMARY OF SUBSTITUTION FOR DELEGATES

DISTRICT —Frederic W. Holcomb, Jr.
Served for Thomas W. Greenlees

SECTION —Gerald L. Haines
Replaced Russel H. Patterson, Jr.
Edward N. Nathan
Served for Theodore C. Max
Frank J. Piper
Served for Francis J. Gilroy

COUNTIES
Bronx —Uriel Adar
Served for Aftab A. Siddiqui
William G. Chorba
Served for Siegfried Mayer
George W. Pelebecky
Served for John D. Cahill
Juana Toporovsky
Served for Edward Shumofsky
Broome —John K. Garan
Served for Lloyd C. Peters
Chautauqua —James G. Dahlie
Served for Russell S. Elwell
Dutchess —Francis J. McMahon
Served for Samuel Simon
Kings —Benjamin E. Lanier
Served for David R. Levine
Nicholas T. Leone
Served for Bernard S. Post
John H. Shelley
Served for Joseph R. Fontanetta
Livingston —Nadene D. Hunter
Served for Norman W. Wetterau
Madison —Leonard A. Argentine
Served for Theodore J. Prowda
Monroe —Charles J. Vacanti
Served for Carlo E. DeSantis
Sidney S. Weinstein
Voted for Robert J. Peartree
Nassau —Joseph I. Cohn
Voted for Morton Goldfarb
Lawrence S. Kryle
Served for Chester E. Kaminester
New York —Robert S. April
Served for Wilbur J. Gould
Solomon Fisch
Served for Albert M. Schwartz
Edward W. Powers, III
Voted for Virginia Kanick
Oneida —Gerald C. Gant
Served for Robert B. Wallace
Orange —Jack Manpel
Served for W. Brewster Wolfe
Queens —Nessim J. Romano
Served for Irving G. Frohman
Schenectady —Donald Wexler
Served for Robert J. Cassidy
Warren —Larry J. Greenberg
Served for Robert A. Francomano
Raymond A. Maddocks
Served for late Betty L. Voelker
Wayne —Joseph J. Kaufman
Served for Norbert Menuhin

Report of Tellers

. . . Speaker Clowe recognized James R. Nunn, M.D., *Chairman*, who presented the following report:

Delegates to the American Medical Association

The following ten were declared elected delegates to the American Medical Association, their two year terms of office to start on January 1, 1983.

EDGAR P. BERRY	224
JOHN L. CLOWE	220
CHARLES N. ASWAD	219
JOSEPH F. SHANAPHY	215
JOSEPH J. KAUFMAN	211
RICHARD D. EBERLE	206
MILTON ROSENBERG	203
RALPH M. SCHWARTZ	197
GEORGE T. C. WAY	134
ROBERT A. MAYERS	92

The following ten were declared alternate delegates to the American Medical Association, their two year terms of office to start on January 1, 1983.

CARL GOLDMARK, JR.	69
DATTATRAYA LANJEWAR	67
ROBERT E. GORDON	47
FELIX R. ROSENHAIN	47
CHARLES R. SALAMONE	45
*WALLACE SALTER	41
JAMES J. KROPELIN	39
RICHARD N. PIERSON, JR.	38
STANLEY A. STECKLER	32
WILLIAM P. CLARK	26

* Medical Student

Closing Proceedings

Thanks to Committees and Staff

. . . Speaker Clowe thanked the convention committees and the members of the staff who worked so hard at the convention, as follows:

Committees of the House of Delegates: House Committee on Bylaws, Edgar P. Berry, M.D., Chairman.

Reference Committees — Credentials, William A. Schwarz, M.D., Chairman; Reports of Officers, David M. Benford, M.D., Chairman; Bylaws, George Lim, M.D., Chairman; Scientific Activities, Publications, & Miscellaneous, Charles R. Salamone, M.D., Chairman; Public Health & Education, Frederick J. Michel, M.D., Chairman; Medical Services, Felix R. Rosenhain, M.D., Chairman; Governmental Affairs and Legal Matters, Seymour R. Stall, M.D., Chairman; Tellers, James R. Nunn, M.D., Chairman; Sergeant at Arms, Stephen R. Chernay, M.D., Chairman; Dinner Committee, Robert A. Mayers, M.D., Chairman.

MSSNY Staff: Edward Siegel, M.D., Executive Vice-President; Henry I. Fineberg, M.D., Executive Vice-President Emeritus; Robert Miller, Convention Manager; Director, Division of Advertising Sales & Meeting Services; Donald R. Moy, J.D., General Counsel; George W. Forrest, Jr., Dinner Dance Coordinator; Director Division of Management Services; Alfred A. Angrist, M.D., Editor, *New York State Journal of Medicine*, and Director, Division of Scientific Publications; Ivan Najman, Acting Director, Division of Computer Systems & Services; Bernard M. Jackson, Director, Division of Insurance and Membership Benefits; Mark Kafka, Director, Division of Membership; Philip G. Keating, Director, Division of Finance; George J. Lawrence, Jr., M.D., Director, Division of Scientific Activities; Edward Hynes, Director, Division of Communications; Robert J. O'Connor, M.D., Director, Division of Medical Services; Deborah Siegel, Director, Department of Research and Development; James McCloskey, Editor, *News of New York;* Mario Menghini, Associate Director, Division of Medical Services; Carol Raimondi, Assistant to the Convention Manager; Eunice Skelly, Associate Director, Division of Membership.

HOUSE OF DELEGATES: Irma A. Erickson, Executive Associate; Patricia Mouquin, Coordinator; Elizabeth Bernardi, Recorder. Reference Committee Secretaries: Vita Chilleme, Joan Grimm, Barbara Lacey, Imelda Morrissey, Cynthia Mustapich, Jeanette Palucci, Joan Riley, Carmen Sanchez, Dorothy Zoltowski; Pamela Maichin, Receptionist and Secretary. Registration—Mary Singer, Coordinator; Alice Cowley and Tina Koty. Information Desk—Lisa Cammalleri, Coordinator; Marie Miller. Production—Charles Struzinski, Coordinator; Fred McIlroy, Jack Oropallo, and Theodore White. Purchasing—Florence Bambek, Coordinator.

Press Room: Gerald Sullivan, News Room Coordinator; Kathleen Atchley, Secretary & Staff, Auxiliary; News Room Staff: Harry Dexter, John Mucci, and Frank Salant.

Membership Benefits Desk: Sylvia Frank.

Staff of the Concord Resort Hotel: Hobson Chinnis, General Sales Manager; Steven Cunningham, Director, Convention Services.

Thanks to the Speaker and Vice-Speaker

. . . The House gave a rising vote of thanks to Speaker Clowe and Vice-Speaker Clark for their just and excellent handling of the meeting . . .

Adjournment

. . . Speaker Clowe adjourned the House at 11:05 a.m. on Wednesday, November 10, 1982, sine die . . .

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OFFICIAL POSITION PAPERS

of the

MEDICAL SOCIETY OF THE STATE OF NEW YORK

In accordance with the directive of the 1980 House of Delegates, the official positions of the Medical Society of the State of New York are included in this publication in conjunction with the proceedings of the House of Delegates. This will make these official positions available to every member of the Society.

All positions taken have been approved by either the Council, acting on behalf of the House of Delegates, or the House itself. These positions may vary from time to time and, therefore, a stated position may no longer be valid. If in doubt, a call to headquarters at Lake Success is suggested for current stands and new developments. Since the Principles of Professional Conduct incorporate many of the ethical standards promulgated by our Society, we have included the latest revision of the Principles on pages 669–674.

Edward Siegel, M.D.
Executive Vice-President

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ABORTION

The Medical Society of the State of New York recognizes the fact of legalized abortion and supports the right of all women to safe and legal abortion.

Based on House of Delegates Resolution 82-5

In 1970 the Council of the Medical Society of the State of New York adopted a position paper on abortion which noted that the MSSNY takes no official position involving the pros and cons of abortion of moral, ethical, or philosophical reasons. A position was taken that when and if an abortion is performed, that it be done under specific guidelines established by the MSSNY. These guidelines are presently under review by the Committee on Maternal and Child Health.

ACUPUNCTURE

The Medical Society of the State of New York regards acupuncture involving the human body as an experimental procedure which falls within the practice of medicine and, hence, should be performed only by or under the direct supervision of a physician licensed in this State, and in an institution appropriate for human research.

MSSNY recognizes the need for, and desires to encourage further research in the techniques, mechanisms of action, and uses of acupuncture. However, because acupuncture is considered at this time strictly as an investigational procedure, it should be performed only in medical centers and teaching hospitals having committees on human research, which will provide the necessary peer review of protocols and appropriate monitoring of such studies.

Council 12/16/76

ADVERTISING

The Medical Society of the State of New York does not prohibit the use of advertising when used in making certain information known to the public, provided that the communication shall not be misleading, shall not contain any false or misleading statements and shall not deceive the public.

The public is entitled to know the names of physicians, their office hours, fixed fees for specific routine professional services and biographical data which will enable people to make a more informed choice of a physician. The physician may furnish this information through the accepted local media for advertising, i.e., office signs, professional cards, dignified announcements, telephone directory listings, reputable directories and news media, which are open to all physicians on like conditions.

Uninvited or in-person solicitation of actual or potential patients, who because of their particular circumstances are vulnerable to undue influence, is unethical. Solicitation shall include:

(1) The not always obvious devices of furnishing or inspiring, by use of public relations firms or the news media, comments concerning cases in which the physician, group or institution has been or is concerned;

(2) the use of statements or claims intended or likely to create inflated or unjustified expectations of favorable results;

(3) the use of statements or claims that are self-laudatory and imply that the physician's skills are superior to other physicians engaged in his field or specialty of practice.

Principles of Professional Conduct Chapter III

ALCOHOLISM

The International Classification of Diseases includes alcoholism in the section described as mental disorders. The Medical Society of the State of New York believes that alcoholism should be listed as both a mental disorder and a medical disorder, for these reasons:

1. Clinical and investigative work of the past three decades has led many workers in the field of alcoholism to the conclusion that it may well be a medical condition with concomitant emotional and psychiatric components.
2. Listing of the disease as a purely mental disorder adds an unnecessary and undesired stigma to an already overly stigmatized illness.
3. Adequate medical education as well as research concerning alcoholism might be significantly broadened and advanced by its inclusion within a "medical" classification of illness.
4. Such reclassification might also result in significant improvement in the accuracy with which alcoholism is reported in documents dealing with public health.
5. As long as alcoholism remains classified as a psychiatric disease, insurance payments for health care are limited to amounts ordinarily offered for psychiatric conditions. These amounts are often less than adequate for medical treatment.

Based on a Resolution Passed by
the Council on 4/28/77

ALCOHOLISM (HEALTH INSURANCE COVERAGE FOR)

MSSNY on January 24, 1974, approved recommendations that to receive the endorsement of MSSNY for its members, any medical insurance plan shall cover not only inhospital treatment when acute detoxification is necessary, but also inpatient treatment in good-quality rehabilitation settings. MSSNY also suggests similar provisions be included in any group medical insurance offered to MSSNY members by a county or national medical society with which MSSNY is affiliated.

Council 12/16/76

BANK CARD (CREDIT CARD) PLAN IN MEDICAL PRACTICE

The Medical Society of the State of New York approved in 1973 that a physician may participate ethically in a bank card plan upon approval of the plan by the county medical society. This method of payment of medical fees is to be on a strictly voluntary basis on both the part of the physician and on the part of the patient.

The following principles are to be used by the county medical society for guidance in approving a bank card plan:

1. The county medical society should be satisfied as to the financial and professional integrity of the bank card plan.
2. Bank card plans should make their plans open to all physicians on the same terms, and the plans should not exploit or capitalize on physicians' participation in the plans.
3. The bank card plan should be notified that the listing of physicians in directories of participating members is contrary to the ethics of the medical profession.
4. A physician may not, because of his participation, increase his fees for medical services rendered to the patient.
5. The physician may not use the plan to solicit patients, and should not encourage patients to use the plan.
6. Plaques, signs, or other devices indicating participation in the plan should be kept to a discrete and dignified minimum in the office, and should not be visible outside the physician's office.

The Medical Society of the State of New York will not encourage its members to utilize the bank card plan in the payment of medical fees.

The use of a bank card in connection with the payment of larger fees—which might normally be paid to the physician in installments—is not to be encouraged. All members of the Society are expected to continue the traditional practice of permitting patients of limited means to pay relatively large fees in installments without interest or carrying charges. Out of respect for the dignity and traditions of the medical profession, the physician may not relieve himself of his obligations "to render service to humanity, reward, or financial gain being a subordinate consideration."

House of Delegates, 1973

BIRTH CONTROL AND FAMILY PLANNING

MSSNY approved support for legislation which would liberalize the sale of contraceptives in New York State by the removing of age restrictions and the limitation of sales to pharmacies.

Council 12/2/72

MSSNY believes information and services on family planning should be as available to persons receiving public welfare assistance as to other members of the community, and that the State Department of Social Services should allow for reimbursement for costs of family planning services and supplies to welfare clients. However, no welfare client or worker, the Society feels, should be required to accept or make a referral for family planning services if it is against his religious principles.

Council 1/21/65

CANCER OF THYROID

The Medical Society of the State of New York in October, 1975, considered the problems surrounding possible side effects resulting from x-ray treatment given to children between the late 1930s and early 1960s for head and neck abnormalities, and advised as follows:

At the time, x-ray was deemed a medically safe and effective procedure for shrinking tonsils, adenoids, and the thymus gland as well as for treatment of other benign conditions. Although this type of treatment has been generally discontinued for at least 15 years, recent evidence suggests that persons who received it are at a higher risk of developing benign or malignant thyroid growths.

Compared to other types of cancer, thyroid cancer is uncommon. The type of cancer associated with x-ray treatment grows slowly and has a high cure rate.

The MSSNY urges persons who had, or suspect that they had, x-ray treatment of the head or neck during childhood or adolescence to contact their physician for a checkup.

Persons who do not have a personal physician can seek referral to a physician by writing to their local medical society or their hospital for referral to a physician.

Council 12/16/76

CERTIFICATE OF NEED

The MSSNY has adopted the policy that no mandatory Certificate of Need be required relative to the purchase of any equipment in a private physician's office setting.

House of Delegates, 1978
Reaffirmed by Council 6/26/80

CHILD ABUSE

The Medical Society of the State of New York, to combat the increasing abuse of children, has approached this problem and has notified all physicians in the State of their moral, medical, and legal responsibility to report all suspected cases of child abuse.

CHIROPRACTIC

The Medical Society of the State of New York has consistently held to the position that chiropractic is an unscientific cult, and has sought to educate the public to that effect.

The MSSNY has continued to stress the fact that chiropractic is not based on scientific principles. We regard it as a cult because it follows the hypothesis of its founder—that disease results from pressure on nerves due to minor misalignments of the spinal column. The chiropractors claim that most illnesses can be cured by adjusting or manipulating certain areas of the spinal column. Of course, such a theory runs counter to the established facts of medical science.

Chiropractors are not educated or equipped, either by background or training, to diagnose human illness. This inability, coupled with their pseudo-scientific method of treatment, and their vociferous stand against life-saving vaccines and the well-recognized advances of the medical profession in the control, diagnosis, treatment, and prevention of disease requires, or perhaps demands, that no recognition be given to them.

Physicians and others interested in public health have a duty to fight this unscientific cult with great vigor.

Council 12/16/76

The Medical Society of the State of New York wishes to reaffirm its belief that a physician should at all times practice a method of treatment which is founded on a scientific basis and which is in the best interest of the patient.

The Medical Society of the State of New York knows of no scientific evidence to condone spinal manipulation as appropriate treatment for the majority of human diseases. The Medical Society of the State of New York will continue to warn the public of the dangers to health in relying on the theory that disease is caused by misalignment of the spine which can be cured by manual manipulation and adjustment.

House of Delegates, 1979

COMPUTER MAILING LISTS

The Medical Society of the State of New York uses the following guidelines when considering requests for mailing lists (computer printouts):

1. Requests from Members

—All requests from members for lists of local county society physicians will generally be referred to the county medical society in question. If the CMS approves the request, the MSSNY will comply.

—Usual acceptable requests:
change of office address
additional colleagues, etc.

2. Requests from Nonmembers.

—Requests from nonmembers are usually not accepted, but will be considered on an individual basis. Factors bearing on acceptance involve commercial aspects, CME, etc.

—Lists are usually available to membership benefit organizations which have been approved by the Council.

3. General Considerations

—MSSNY, on completion of its demographic survey, has an advanced capability for listing economically profitable information. Our policy will be quite circumspect in making this information available. MSSNY's general policy will be to protect the confidentiality of these lists to avoid needless harassment of our members by commercial ventures.

—The Executive Vice-President shall be empowered to decide each case, subject, of course, to the Council's ultimate authority.

Council 2/11/82

CONTINUING MEDICAL EDUCATION

For many years MSSNY has been developing a Statewide program which will help physicians throughout the State fulfill their continuing medical education needs with a minimum loss of medical practice time. At the November, 1975, meeting of the MSSNY House of Delegates, a resolution was passed to make continuing medical education mandatory for membership.

Through the leadership of MSSNY, in 1976 the New York State Council on Continuing Medical Education was organized with representation from MSSNY, the Associated Medical Schools of New York, and the Association of Medical Specialty Societies of New York. The New York State Department of Health and Education participates in advisory capacities.

The Council on Continuing Medical Education will foster a Statewide plan to improve the quality of medical care which will utilize relevant educational means. It will determine the medical education needs of physicians, encourage the development of related educational programs, maintain a program registry, and establish procedures for documenting physician participation.

MSSNY, cooperating with the AMA Physician's Recognition Award program, has been making site visits to institutions throughout the State which elect to participate in the program.

Council 12/16/76

An active member who fails to fulfill the requirements for continuing medical education established by the Council of the Medical Society of the State of New York shall not be in good standing. This section shall become effective on March 1, 1981.

An active member as defined in Article II, Section 1, who is found not to be in good standing as of March 1, 1981, or March 1 of any subsequent year, for failing to comply with paragraph 1 of this Section shall receive reasonable notice that he must fulfill continuing medical education requirements by the last day of December of the year in which he is found not to be in good standing. An active member who does not fulfill continuing medical education requirements by the last day of December of the year in which he is found not to be in good standing shall automatically cease to be a member of the component county medical society and the State Society, unless, in the view of the Council, specific mitigating circumstances exist that the physician could not complete the CME requirements.

Article II, Section 3 of The MSSNY Bylaws

The Medical Society of the State of New York is opposed to any state or federal legislation and/or regulation which would mandate proof of continued medical education for reregistration of a license to practice medicine.

Based on House of Delegates Resolution 81-50

CONTINUING MEDICAL EDUCATION FOR RETIRED AND SEMI-RETIRED PHYSICIANS

Retired physicians who have no connection with medical practice, medical education, or medical administration, and who do not earn a living from any of these activities need not fulfill the membership requirement for continuing medical education of the Medical Society of the State of New York.

Semi-retired physicians, if they in any way treat patients or teach or administer to other physicians who treat patients, must fulfill the continuing medical education requirement in order to retain membership in MSSNY.

Council 4/28/77

If for any reason, such as sickness, disability, or hardship, a physician feels that he should not be obliged to fulfill the CME requirement, he should present his case to his county medical society. If the county medical society recommends that he be relieved of his CME obligation, the recommendation will be accepted by MSSNY, for the period of time designated by the county society.

Council 9/28/78

COST CONTAINMENT

The Medical Society of the State of New York believes in addressing the problem of cost containment through voluntary effort in our offices and hospitals.

"Cost Containment" of medical care is, to use the current jargon, the "in" topic. Unquestionably this subject deserves the serious attention of all citizens, particularly the medical profession, to determine that available funds are expended most effectively. The MSSNY is troubled by what is left "out" of the ongoing publicity, namely that the quality of medical care not be compromised and accessibility to such care not be restricted by proposals that consider solely costs. It is acknowledged that the quality of care in the U.S. is the highest in the world and, for the great majority of our people, so is accessibility to that care. This is not to deny that there is room for improvement, but in endeavoring to make available to that small percentage of the population which at present does not have access to the best medical care, it is important not to destroy the fabric of the existing structure which has functioned so effectively and been characterized by marked advances in medical knowledge, technology, and therapy. It is disturbing to the medical profession to note that almost all the proposals being advanced concentrate on cost with little consideration given to maintaining and enhancing quality and access, ignoring the intent of Congress in enacting P.L. 93-641 that "the achievement of equal access to quality health care at a reasonable cost is a priority of the federal government." Limiting attention to cost alone, is, therefore, contrary to the expressed purpose of the National Health Planning and Resources Development Act (P.L. 93-641).

Some general observations must be considered. Monetary resources will never be unlimited, and decisions as to priorities must be made by an informed citizenry as to the percentage it wants expended on medical care vis-à-vis other national needs. That decision must be arrived at by the public and not by government regulatory bureaus. The self-discipline of individuals and the correction of social environmental conditions that are conducive to poor health are the prime factors in "preventive" medicine and must be addressed by public bodies. Proposed measures to cut costs must recognize that the ill patient and his family insist on all available care, including diagnostic procedures. The physician by historical ethics and training is motivated to render to the individual patient all measures that may possibly assist in recovery and health maintenance, with costs a secondary consideration. Rigid bureaucratic restrictions lead to dictating when, how, and where medical care will be provided and the public must be made aware of trends that will ultimately result in circumscribing the individual's freedom of decision and choice, and the overriding of physicians' professional judgements. Mandated cost controls programs are likely to be antithetical to individuals' rights to make unfettered decisions in regard to their medical care.

Legislative bodies continuously broaden existing health care programs and initiate new ones. The merits of these programs are not at issue here, but the contradiction between controlling costs and mandating expensive new programs must be acknowledged. Also recognized must be the expense involved in responding to government-imposed regulations, an expenditure in time, personnel, and resources that contributes nothing to the direct care of patients, but consumes a not inconsiderable portion of the health dollar. Much has been said of late about simplifying and decreasing governmental regulatory paper work, but in the health field the converse has been true.

The above caveats recorded, there are feasible measures to be considered, designed to obtain the greatest usefulness of the health dollar. The largest portion of the latter goes to hospital care. In considering hospital cost containment proposals, sight must not be lost that to survive hospitals need to be financially sound, a basic concept that recent New York State mandated controls seem to ignore. It is unrealistic to restrict hospital rate increases on one hand, and leave their expenses a wide open door. Measures to be considered are:

—Facilitating the care of patients from in-hospital to ambulatory management with a realistic payment system provided for the latter.

—Cooperative studies by hospital staffs in suitable geographic areas of shared facilities and services.

—The closing of hospitals or the merging of hospital facilities to be effected only after thorough determination of the local needs. The AMA response to HEW's statement contained in the commentary accompanying revised National Guidelines for Health Planning that the primary goal is "short term opportunities for cost containment," is most pertinent; "while we recognize that health care costs must be considered, we believe that it is improper and inimical to quality medical care to consider only economic issues at the expense of other important factors." It also subverts the intent of Congress as noted above.

—Review and improvement of regulations and procedures to ease the transfer to nursing homes of patients as soon as acute hospital care is no longer needed, but to provide for ready readmission to the hospital should the necessity arise.

—Removal of restrictions to encourage home health care as the preferable alternative to nursing home confinement, including informing physicians of the home health care services available in their community.

—Increasing the awareness of physicians, the decision-makers, of the costs of hospital stays and services by furnishing them, in an appropriate manner, copies of physician-influenced expenses they engender. Similar programs should be instituted for house staffs.

—Conducting seminars on cost control involving medical staff presidents, chiefs of staffs, PSRO representatives, hospital administrators, insurance carriers, and nurse representatives.

—Hospital staff clinical conferences to incorporate in discussions of cases the cost factors influenced by the ordering of diagnostic and therapeutic procedures that may not have been warranted.

—Individual hospitals to constitute multi-disciplinary cost containment committees, with physicians participating where medical care of patients is involved.

—Hospitals to establish patient safety programs through liability control systems, designed to limit or diminish the soaring costs of liability insurance.

—Expanding preadmission evaluation of patients' arrangements to decrease length of hospital stay, with costs to be covered by hospital insurance programs.

Measures involving physicians apart from in-hospital patient care:

—Expansion of PSRO activities for review of challenged patterns of practice in the office setting.

—Coinsurance to be part of all health care insurance as the most effective measure to control overutilization demands by the patient, with appropriate provisions for the low income and a top amount for catastrophic illnesses.

—Making available to the patient multiple forms of health care delivery systems (i.e. fee-for-service, prepayment plan, HMOs, etc.) competing on equal terms without subsidization, either overt or concealed, with the success of one or the other determined by the patients' choice. This equality of selection to prevail in employer- or union-sponsored health plans as well, with the factors of coercion removed.

—Apart from the one-to-one patient-physician relationship, medical organizations to cooperate with groups whose goals are the education of the public in health prevention life styles and "preventive" medicine.

—The institution of corrective measures in the field of medical liability to decrease the expense of "defensive" medical practices and abate the excessive cost of this insurance which ultimately is borne by the public.

—Establishment of criteria for physicians' office surgical suites that would qualify for adequate insurance reimbursement as a less costly alternative to inhospital care or outpatient hospital centers.

—Government-financed programs such as Medicaid to fund realistic payment schedules that would encourage participation of the ethical, competent physician and would be less costly than the "Medicaid Mill" alternative.

Proposals other than those listed above will undoubtedly be developed with further exploration of the subject of cost containment. It is recommended that to avoid immoderate disruption in the present system of providing medical care, major innovations be tested first in pilot projects to avoid the costly failures that have characterized hastily conceived governmental projects in the past. There will always be room for modification and improvement with changing times, but such should be effected only after deliberate consideration and in an orderly manner. In a recent survey HEW found that the nation wants changes in the health delivery system to "build on the strength of the existing system" and we urge that course rather than attempt to foist on the public politically glamorous but unsound programs of dubious merit that would reduce medical care to the level of mediocrity. The medical profession, through its various organizations, stands ready to participate in and make available its unqiue expertise to any and all projects designed to improve health care delivery. It needs only to be requested to do so.

COUNCIL 4/27/78

Suggestions for Hospital Cost Awareness Programs

1. Maintenance of High Quality Care — the sine qua non.
   Educational programs.
2. Discussion of economic factors included in at least one case presentation at monthly meetings of Departments; e.g., length of stay, tests ordered, medications prescribed, etc. — necessity, alternatives.
3. Ambulatory Care Facilities
   Adequate facilities, utilization, ease of scheduling.
4. Length of Stay for Routine Cases
   Evaluation of utilization review effectiveness.
   Appropriate arrangements for readmission.
   Duplication of tests on readmission.
5. Pre-admission scheduling of tests (e.g., x-ray) to avoid undue delay and unnecessary hospital stay.
6. Acceptance of Tests Performed Prior to Admission
   Where performed both by hospital or staff physicians.
   X-rays to accompany patient for interpretation by hospital radiologist and entered on hospital chart.
7. Intensive Care Units
   Appropriate utilization.
   Step-down units.
8. Early Discharge Planning
   Involving family members.
9. Home Health Care
   Adequate arrangements with Social Service Department and outside agencies.
   Early planning.
10. Involvement of house staff in program.
11. Coordination with Nursing and other Hospital Departments.
12. Coordination with Hospital Board of Trustees and Administrator.
13. Hospitals should develop a concept of "Swing Beds."
14. Public Relations
    Communication media briefing.
    Community organizations.
15. Establishment of Hospital Professional Efficiency Committees where such do not exist.
16. Establishment of Local Area Inter-relationships between Hospital Committees.
    County Medical Society Involvement.
    Stated meetings.

COUNCIL 4/17/80

DEFINITION OF DEATH

Any proposed legislation concerning death must, in its determination of when death may be proclaimed, follow this definition in order to receive the approval of the Medical Society of the State of New York:

A person shall be dead when in the announced opinion of a duly licensed physician based on prevailing standards of medical practice, such person has experienced an irreversible cessation both of spontaneous respiratory and circulatory functions. If the use of artificial means of support precludes a determination that these functions have ceased, a person shall be dead if in the announced opinion of a duly licensed physician, based on prevailing standards of medical practice, such person has experienced a total and irreversible cessation of brain function.

Council 4/28/77
Reaffirmed by House of Delegates Resolution 80-6

In addition, the Medical Society of the State of New York adopted the criteria on the legal definition of death as formulated by the Ad Hoc Committee of the Harvard Medical School (Reference *JAMA* 205: 337–340, 1968)

House of Delegates, 1978

PRONOUNCEMENT OF DEATH

The position of the MSSNY is that it opposes any legislation which would designate individuals other than physicians to pronounce death.

House of Delegates, 1979

DELINQUENT ACCOUNTS

A physician who has experienced problems with delinquent accounts may properly choose to request that payment be made at the time of treatment or add interest or other reasonable charges to delinquent accounts. The patient must be notified in advance of the interest or other finance or service charges by such means as the posting of a notice in the physician's waiting room or appropriate notations on the billing statement. The physician must comply with state and federal laws and regulations applicable to the imposition of such charges, i.e., the Truth in Lending Law.

Principles of Professional Conduct
Chapter II, Section 7

DISCIPLINE

In our judgment, we cannot either enlarge upon or diminish the rules concerning the subject of discipline outlined in the "Principles of Professional Conduct" of the Medical Society of the State of New York.

Council 12/16/76

DISCRIMINATION

The Medical Society of the State of New York is unalterably opposed to the denial of membership in component county medical societies and the State Medical Society to any physician practicing or residing in the State of New York, because of race, color, religion, sex, ethnic affiliation, or national origin. It calls upon all component county medical societies, and upon all members of the MSSNY, to exert every effort to end every instance in which such equal rights are denied.

The Judicial Council of the MSSNY, pursuant to Section 2 of Article VII of the Bylaws, shall hear appeals from applicants for membership in a component county medical society who have been excluded from membership in such society for any reason, including discrimination.

Council 12/16/76

"DO NOT RESUSCITATE" GUIDELINES FOR HOSPITALS AND PHYSICIANS

The following are intended *only* to be guidelines for physicians and hospitals. Hospital medical staffs and governing bodies are encouraged to develop policies consistent with their respective by-laws and rules and regulations.

DEFINITION

DNR (Do Not Resuscitate) means that, in the event of a cardiac or respiratory arrest, cardiopulmonary resuscitative measures will not be initiated or carried out.

BACKGROUND

1. An appropriate knowledge of the serious nature of the patient's medical condition is necessary.
2. The attending physician should determine the appropriateness of a DNR order for any given patient.
3. DNR orders are compatible with maximal therapeutic care. A patient may receive vigorous support in all other therapeutic modalities and yet a DNR order may be justified.
4. When a patient is capable of making his own judgments, the DNR decision should be reached consensually by the patient and physician. When the patient is not capable of making his own decision, the decision should be reached after consultation between the appropriate family member(s) and the physician. If a patient disagrees, or, in the case of a patient incapable of making an appropriate decision, the family member(s) disagree, a DNR order should not be written.

IMPLEMENTATION

1. Once the DNR decision has been made, this directive shall be written as a formal order by the attending physician. A verbal or telephone order for DNR cannot be justified as a sound medical or legal practice.
2. It is the responsibility of the attending physician to insure that this order and its meaning are discussed with appropriate members of the hospital staff.
3. The facts and considerations relevant to this decision shall be recorded by the attending physician in the progress notes.
4. The DNR order shall be subject to review at any time by all concerned parties on a regular basis and may be rescinded at any time.

Council 9/9/82

DRIVING WHILE INTOXICATED (DWI)

The Medical Society of the State of New York has taken the following position in regard to alcohol abuse on New York State highways:

a) Early identification of alcohol-abusing drivers should be facilitated by more widespread use in the field of chemical testing devices. Portable breathalizers, which are now available, should be provided for use by officers at the time of initial investigation of accidents or violations because of impaired driving behavior.

b) An education program developed by the MSSNY and supported by the New York State Department of Motor Vehicles for enforcement and judiciary personnel on alcohol abuse and driving is recommended. The importance of early identification of alcohol-abusing drivers to achieve earlier treatment and rehabilitation should be explained. The acute and chronic effects of alcohol plus a definition and description of alcoholism and methods of intervention and treatment should be described as part of the program. MSSNY should devise the medical and professional elements of the program, but support from the NYS Department of Motor Vehicles and the State would be necessary for implementation.

c) Local alcohol control programs in New York State which have successfully increased apprehension, conviction, and rehabilitation rates of alcohol-abusing drivers should be supported. MSSNY offers its services as a liaison between the medical profession and citizens groups to help coordinate a comprehensive program against alcoholism.

d) An advertising campaign to educate the public, particularly young drivers, on the effects of alcohol should be undertaken. The public should also be made aware of the fact that violations and accidents due to alcohol abuse are early warning signs of alcoholism. The use of warning signs in public drinking places, retail liquor stores, and on the containers of alcoholic beverages should also be supported.

e) MSSNY favors the passage of legislation supporting antidrunk driving measures such as the removal of intoxicated drivers from the road by either an immediate temporary suspension of a driver's license or an immediate revocation of a driver's license based on the blood alcohol content of the driver sufficient to convict of "Driving while Intoxicated" rather than "Driving while Impaired."

f) MSSNY also is in support of legislative and administrative actions by state and local governments which will increase the realization on the part of drunk drivers that they may be arrested, prosecuted, convicted and punished.

g) MSSNY is in support of legislation which would raise the legal drinking age in New York to 21.

BASED ON HOUSE OF DELEGATES RESOLUTIONS 82-20, 82-37, AND 82-75
COUNCIL 9/10/81

DRUGS

The Society's position on various drugs as well as Generic Drugs, Generic Drug Substitution, Identification of Unit Medication by a Uniform National Drug Code Number, is listed individually below:

ANOREXIGENIC DRUGS — (See Amphetamines)

AMPHETAMINES

It is the position of the Medical Society of the State of New York that amphetamines should not be used in the management of weight control problems; however, it recognizes that there are legitimate reasons for prescribing amphetamines (e.g., narcolepsy, minimal brain damage, and in conjunction with narcotics in control of intractable pain).

COUNCIL 1/22/81

EXPIRATION DATE AND CONTROL NUMBER ON DRUG LABELS

The Medical Society of the State of New York supports appropriate legislative or regulatory action that would mandate the inclusion of the expiration date and control number on all prescription drug labels on containers dispensed to patients.

BASED ON HOUSE OF DELEGATES RESOLUTION 79-4

GENERIC DRUGS

A distinctive feature of the practice of medicine is insistence by physicians that the highest possible quality characterize all the modalities utilized in the care of their patients. This feature is responsible for a level of care in the United States which is the highest anywhere in the world.

GENERIC DRUG SUBSTITUTION

The members of the Medical Society of the State of New York are as interested, if not more, as any other group of citizens in the State, in eliminating unnecessary costs in the delivery of health care and are actively engaged in developing measures that will lead to the most effective use of the dollars expended on health care, provided that none of these measures results in a lowering of the quality of medical care available to and afforded the public.

Two measures that could lead to a wider use of generic drugs should be considered.

The first is to conduct controlled, scientifically valid studies to conclusively establish that generic drug substitutes are equivalent in bio-availability and therapeutic equivalence. Disturbing reports have appeared in scientific medical literature that seriously question whether generic drugs approved by the FDA do, in fact, satisfy these criteria. In the face of such doubts, it is understandable that physicians will be reluctant to authorize drug substitutes for medications with which they are familiar by experience. The necessary studies do entail expenditure of money and delays, but these are small prices to pay when one is primarily concerned with providing the very best available drug to an ill patient.

A second major deterrent to physicians readily agreeing to generic drug substitution is the question of their liability if a substitute, of which they have insufficient knowledge and no control in choice, should prove to be ineffective for the purpose intended and the patient suffers thereby. Our Society has had correspondence with both the State and federal governments to determine the limitations of a physician's liability and the responses have been equivocal. It is our interpretation, as the Law now stands, that the physician may still be liable. An unequivocal statement of acceptance of complete liability, by either the federal or State government, in the event of untoward effects developing solely from the use of a generic drug substitute, such as was promulgated for the swine flu immunization program, would remove this anxiety from the physician's mind and encourage wider use of generic substitution.

There is a basic principle to be stressed in the consideration of this subject, namely, that no law should curb the professional judgment of a physician in the treatment of his patient. Years of intensive schooling and training mark the education of a physician and his licensure. It is such training that establishes the physician as the one best able to determine the most effective means of therapy for the individual problems of a particular patient. It is most earnestly to be hoped that no inadequate substitute for this professional judgment, based solely on cost, will ever be enacted.

HEROIN

The Medical Society of the State of New York opposes the use of heroin for pain relief in the terminally ill patient because there are as yet no data which show its superiority over other drugs currently being used. The increased availability of heroin could also open up avenues permitting its divergence to street and other abuses.

COUNCIL 6/21/79

LAETRILE

The Medical Society of the State of New York believes that there is no scientific evidence that laetrile is effective or safe in treating or preventing cancer, and that making it available to cancer patients could prove medically detrimental.

Patients who are persuaded of the effectiveness of laetrile as a treatment for cancer often postpone seeking proven medical treatment which may eradicate or ameliorate the disease, and such delay may allow progression from a curable to an incurable situation.

In addition, some patients who may be considered terminal in one center may, in fact, respond to the newest therapies available. The decision that there is no further treatment which has any chance of benefit is a highly sophisticated one. Those who advocate the use of laetrile as a treatment for malignancies in effect exploit the victims of cancer and their families by offering unfounded representations that the patient's cancer will be cured.

COUNCIL 6/9/77
REAFFIRMED 4/27/78

MARIJUANA

The Medical Society of the State of New York (MSSNY) believes that laws pertaining to individual use and profession of small amounts of marijuana for personal use should be decreased to misdemeanor status; that the sale and/or importation of marijuana be continued to be regarded a felony; that driving under the influence of marijuana should be prohibited by motor vehicle law; that State and Federal health departments should develop means of quickly testing the potency of confiscated marijuana and develop rapid test methods for determining its presence in blood and urine.

MSSNY believes that, to prevent people from thinking there is no risk attached to the use of marijuana, an adequate education and drug information program to disseminate the latest information on the drug should be started by the New York State Health Department in conjunction with MSSNY and the State Education Department.

MSSNY urges that more serious research should be done at the federal and State levels on the effects of long-term and short-term use of marijuana.

COUNCIL 12/21/78

The Medical Society of the State of New York supported a legislative action which provides for the use of marijuana to alleviate the ill effects of cancer chemotherapy, glaucoma, and for other therapeutic uses.

COUNCIL 6/26/80

TRIPLICATE PRESCRIPTION PROGRAM

The House of Delegates in 1980 called on the Medical Society of the State of New York to encourage the establishment of prescription practice committees throughout the State and to undertake discussions with the Department of Health of the State of New York with the objective of establishing a procedure which would require that the State Health Department verify the accuracy of the data in the Triplicate Prescription Computer Data Banks with these committees.

BASED ON HOUSE OF DELEGATES RESOLUTION 80-28

The Medical Society of the State of New York recommended to the New York State Legislature that the authority of the Commissioner of Health of the State of New York to add a controlled substance to the New York State Triplicate Prescription Program in an emergency situation expire after 60 days unless specifically authorized for continuation by the Legislature, and that the Triplicate Prescription Program be studied by an independent group five years from January 1, 1978, by which time enough envidence may have been accumulated to evaluate its continuation.

BASED ON SUBSTITUTE RESOLUTION FOR RESOLUTION 80-39 AND 80-53, HOUSE OF DELEGATES

UNIT IDENTIFICATION

The Medical Society of the State of New York seeks Federal legislation requiring that all unit medications such as pills, capsules, ampules, etc., manufactured and sold for human consumption, be required to have clearly imprinted upon each, the uniform National Drug Code Number (NDC #) for easy and ready identification of the drug contents of such medication units.

BASED ON HOUSE OF DELEGATES RESOLUTION 78-56

DUE PROCESS

The basic principles of a fair and objective hearing should be accorded to the physician whose professional conduct is being reviewed. These basic guarantees are: a specific charge, adequate notice of hearing, and opportunity to be present and to hear the evidence, and to present a defense. These principles apply whether the hearing body is a medical society tribunal or a hospital committee composed of physicians.

Council 12/16/76

EUTHANASIA

The use of Euthanasia is not in the province of the physician.

Council 12/16/76

See also *Living Wills*

EXPERT MEDICAL WITNESS

Ethical Guidelines for MSSNY Members as Medical Experts

Whereas, The spirit of justice is being thwarted by the fact that some doctors pose and testify as experts in medical fields in which they lack expertise; and

Whereas, The Medical Society of the State of New York has the obligation to provide ethical guidelines for its membership; therefore be it

Resolved, That the Medical Society of the State of New York establish ethical guidelines for its membership providing the criteria for medical experts as follows:

1. An expert witness must have basic educational and professional knowledge as a general foundation for his testimony, and, in addition, have current personal experience and practical familiarity with the problems being considered and be actively engaged in the practice of the medical subject under discussion.

   This may be evidenced by one or more of the following:

   a. Board certification.

   b. Current active membership in a recognized specialty organization, such as ACS, ACOG, or ACP, etc.

   c. Where the physician has been granted privileges in a hospital or institution in the department in which the physician holds himself to be an expert.
2. Physicians completely retired from active practice shall be considered expert if the time of completed retirement is not greater than five (5) years, and if the physician has previously been qualified as an expert in any of the above categories.

Council 2/22/79

FEDERAL TRADE COMMISSION

The Federal Trade Commission has exceeded the authority conferred upon it by Congress and has, through exercise of its rule-making powers, overriden State laws and prevented voluntary associations from setting standards of professional responsibility for their own members. The Medical Society of the State of New York firmly believes that Congress should reaffirm the traditional role of the states to regulate the professions as well as the authority of professional societies to conduct their activities without unwarranted and excessive federal government interference.

Council 6/26/80

FLUORIDE RINSE PROGRAM

The Medical Society of the State of New York endorses the concept of school fluoride rinse programs and that members of MSSNY encourage the schools to participate in fluoride rinse programs in those communities without fluoridation of drinking water.

Based on House of Delegates Resolution 80-12

GASOLINE RATIONING

The Medical Society of the State of New York respectfully requests that the Department of Energy, both federal and state, understand and take regulatory recognition of the fuel priorities of all health professionals so that any fuel plan does not impact adversely on the rendering of quality medical care.

Council 9/28/78

GENETIC DEFECTS — PHYSICIAN RESPONSIBILITY TO INFORM PATIENT

The physician has a responsibility to inform the patient/couple of the risk of possible genetic defects when the patient is at risk because of age, previous obstetrical history, maternal/paternal family history, or exposure to predisposing factors; to advice the patient/couple of the availability of genetic counseling, types of diagnostic procedures, and the related risks involved.

The patient/couple has a responsibility to seek counseling when the possibility of genetic defects exists, as evidenced in their personal or family history, and to secure information that will enhance the patient/couple's accountability in productive decision-making.

Physician responsibility should be based on the standards of medical practice and the methods of procedure prevailing at the time of counseling.

Only a small percentage of birth defects have specific diagnostic tests. The great majority of defects are not able to be diagnosed prenatally.

Council 5/17/79

HEALTH INSURANCE CLAIM FORMS

The Universal (Common) Insurance Claim Form HCFA 1500 (color coded) is to be used by all carriers in New York State on a mandated basis starting in early 1982. The commercial carriers, however, may continue to use the AMA Modified Claim Form but must accept the HCFA 1500 when submitted to them. The Medical Society of the State of New York fully supports the use of the Common Claim Form by all carriers and recognizes that the mandated use of this Common Claim Form is a major step forward toward simplifying current reimbursement procedures.

See also "Universal Code for Reporting Medical Services"

HMO (HEALTH MAINTENANCE ORGANIZATION) AND IPA (INDEPENDENT PRACTICE ASSOCIATIONS)

It is the position of the Medical Society of the State of New York that:

(a) the HMO and HMO-IPA concepts are valid and acceptable alternative health care delivery systems but that
(b) no single pattern of health care delivery is necessarily suited to all patients or to all physicians, and that
(c) there must be available multiple alternative delivery mechanisms among which both the patient and the physician can truly exercise the right of free choice of how they will receive and disburse quality medical care, and that
(d) a legitimately recognized health care delivery system, regardless of the cost potential, should have equal participation in a free market, and that
(e) employers should contribute equal amounts for each employee's health benefit plan, regardless of the plan selected, and that
(f) following AMA policy, "fair market competition among all systems of health care delivery continue to be AMA policy, with the potential growth of HMOs being determined not by federal subsidy, preferential federal regulations, and federal advertising promotion, but by the number of people who prefer this mode of delivery."

Council 3/25/82

HEALTH SCREENING PROGRAMS

It is the position of the Medical Society of the State of New York that organizations, agencies or other entities that operate or sponsor multiphasic health screening programs should be urged to include in their promotional and explanatory materials on the availability of the program a definitive statement that reports on the screening test results will be furnished to the individual participants only and that each participant is responsible for obtaining any needed medical evaluation or follow-up should the results of the tests deviate from the normal range. Those operating or sponsoring multiphasic health screening programs also be urged to utilize report forms that state in bold-face type that the report does not constitute a medical diagnosis or evaluation and that the participant should consult a physician of his or her choice if the screening test results are not within the normal limits indicated on the report.

Council 12/16/82

HOME HEALTH CARE

The Medical Society of the State of New York encourages the stimulation of physician interest in, and acceptance of home care as an integral part of the overall continuum of medical care. We also emphasize the need for medical schools and internship programs to educate medical students, interns, residents, and practicing physicians in the value and proper use of home health care programs. Hospital boards and medical staffs should encourage community interest in support of home health care programs. Community health planning agencies should have representation from organizations concerned with providing home care services; and practicing physicians should involve themselves in developing home health care programs along with community health planning agencies.

The Medical Society of the State of New York supports the concept that all home health agencies, voluntary or proprietary, should be subject to the same controls, regulations, and standards.

The Medical Society of the State of New York also supports the concept that the physician is responsible for monitoring the home health care of his patients, or for the transferal of this responsibility to another physician.

Council 9/15/77 (Abstract)

For further information relative to the Medical Society of the State of New York position on Home Health Care inquire at the Medical Society of the State of New York headquarters about —

1. An article on Home Health Care, published in the October, 1978, issue of the *New York State Journal of Medicine*, and
2. Statement of the Medical Society of the State of New York re Alternatives to Institutionalization, presented to the Senate and Assembly Committees in December, 1976.

HOME HEALTH CARE FOR THE ELDERLY

The Medical Society of the State of New York supports the concept that reimbursement for home health care for the elderly be provided on a twenty-four hour a day basis, seven days a week, if required for the adequate care of the patient and to prevent the institutionalization of such patient for reasons not requiring institutional care.

Based on House of Delegates Resolution 80-37

HOSPICE

A hospice is a concept of care, home and family centered, designed to meet the physical, psychological, spiritual, and social needs of terminally ill patients and their families. This care shall be rendered by a physician-led interdisciplinary team.

The Medical Society of the State of New York concurs with the position of the American Medical Association "approving the physician-directed hospice concept to enable the terminally ill to die in surroundings more homelike and congenial than the usual hospital environment and encouraging extension and third party coverage of this specialized approach for the provision of terminal care."

The seven goals of good hospice care are:

1) To keep the patient at home as long as possible.
2) To help the patient to live as fully as possible.
3) To support the family as the unit of care.
4) To supplement, not duplicate, existing services.
5) To keep costs down through adequate peer review.
6) To educate health professionals and lay people.
7) To limit the use of hospices to clearly defined terminal needs.

(Clearly defined terminal needs mean those physical, psychological, spiritual, and social requirements necessary to ensure the tranquillity, fulfillment, and dignity of the dying patient. A terminal state implies the cessation of heroic, highly technological treatment and the initiation of palliative, comfort-oriented procedures).

Council 6/21/79

HOSPITALS

ADMITTING PRIVILEGES

The Medical Society of the State of New York supports the policy that hospitals should continue to offer equal hospital admitting privileges and equal access to beds to qualified physicians on their staff regardless of the physician's choice of reimbursement mechanisms or their financial arrangements with their hospital.

Based on House of Delegates Resolution 82-58

GUIDELINES FOR ATTENDING PHYSICIANS AND RESIDENTS

The Medical Society of the State of New York adopted the following statement as part of its official position. It is a supplement to the Guidelines for Attending Physicians and Residents established by the New York Academy of Medicine.

Because optimum care of hospitalized patients often entails technically sophisticated treatment modalities, reliance on the expertise of specialists and consultants, and frequent clinical assessments and judgments by house officers or other designees of the attending physician — it is imperative to specifically indicate the authority and responsibility for decisions about treatment and management. Ethically and legally, the patient's freely selected attending physician possesses this authority and responsibility. Such action will strengthen the patient-physician relationship essential to the continuity of a patient's care.

The patient's own physician clearly retains ultimate responsibility for patient management, but close cooperation between his/her own physician and the involved house officers and specialist consultants is essential to provide the highest quality of patient care. Features of this cooperation should include at least the following:

1. Ongoing discussions and review of the patient's course by the attending and other involved physicians.
2. Explicit approval and/or supervision by the attending of invasive, hazardous, or complex diagnostic or treatment procedures.
3. Explicit approval by the attending of the indications or requests for consultations, and of the choice of consultant.
4. Recognition by the attending physician to contribute to the education, training, and learning experience of the house staff.
5. Conscientious efforts by the house staff and other involved physicians prompted to inform the attending of unexpected changes in the patient's condition or needs for treatment.
6. Although there is recognition by both attendings and house officers that they share responsibility for writing orders, recording observations, or formulating analyses or treatment goals in the progress notes, the ultimate authority for patient care is the patient's attending physician.

These guidelines will best serve the goal of optimum care for the patient and will enhance the quality training for young physicians.

The attending physicians, hospital administrations, and house officers have the obligation to respect these guidelines and the attending physician shall candidly inform the patient of the roles of the various physicians in that patient's care. In such explanations, the patient's right freely to select his/her own physician must be maintained. No assignment of attending physician shall be made without prior discussion of available options with the patient, and then only with his/her full knowledge and freely given consent.

Based on House of Delegates Resolution 82-51

The Guidelines of the New York Academy of Medicine are available, upon request, at the Society Headquarters in Lake Success.

MEDICAL STAFF CRITERIA

The policy of the Medical Society of the State of New York is that admission to a hospital medical staff should be on an individual basis, after an impartial review by the medical staff credentialing committee of the applicant's qualifications; such impartial review should serve as the basis for the hospital Board of Trustees' final determination upon request for appointment to the medical staff, and that membership in any group affiliated with the hospital shall not be a substitute for review of the individual's qualifications.

Based on House of Delegates Resolution 80-25
Amended by Council 1/22/81

See also *Medical Staff Membership*

MEDICAL STAFF MEMBERSHIP AND HOSPITAL PRIVILEGES FOR PRIVATE PRACTICING PHYSICIANS

Guidelines Established by the Medical Society of the State of New York for Individual Hospitals and their Medical Staffs in Determining Medical Staff Membership and Hospital Privileges

A. General Guidelines for Membership on the Medical Staff.

1. License to practice medicine in New York State.
2. Ethical and moral character.
3. Residence within a reasonable working distance from the hospital.
4. Willingness to contribute with service in an assigned role within the hospital provided that the nature of this service is commensurate with his type of practice and is approximately equal to that provided by other members of the medical staff.

5. Willingness to abide with the bylaws of the medical staff.

B. Granting of Hospital Privileges

Privileges shall be granted on the basis of the individual qualifications which shall take into consideration the interest, training, experience, and ability of each practitioner.

1. Hospitals without clinical departments shall grant privileges on an individual basis in accordance with the interest, training, and experience of the applicant. Such hospitals may consult with the nearest departmentalized hospital, if necessary, in the determination of such privilege. It shall be accepted that in today's medical community there is no role for the partially trained specialist.

2. Hospitals with clinical departments shall grant privileges based on training and experience consistent with the requirements of the various Specialty Boards. Family physicians who apply to such hospitals shall become members of the Department of Family Practice, where it has been developed, with clinical privileges assigned by the Department of Family Practice, with the approval of the specific department in which privileges are requested.

3. The dilemma of teaching hospitals in obtaining an adequate patient population that would permit the fulfillment of their purposes results in large measure from the lack of admissions by the personal physicians because of the loss of control of their patients when the latter are admitted into such institutions. A solution to this problem can be reached if university hospitals establish a methodology that will effect close cooperation between the personal physicians and the university hospital attending and resident staff, with the personal physicians continually involved in the care of their patients, and observe the policy originally proposed by this society and later adopted by the AMA and that is that there shall be one physician responsible for the patient's care, and that physician shall be the patient's own private physician.

All new medical staff members shall pass through a period of observation and supervision to assure that each member shall be able to demonstrate the ability to apply his training and experience in an appropriate manner.

Furthermore, all members of all clinical departments shall be subject to appropriate peer review on a periodic and equitable basis as a means of assuring continuing quality patient care.

C. Appeals Mechanisms

While it realized that most hospitals have bylaws with a built-in due process mechanism for staff membership and medical privileges, the possibility for obstruction to staff membership and medical privilege for inappropriate reasons does exist.

Therefore, it is recommended that an Appeals Board consisting of representatives from the MSSNY and the HANYS be created as a BODY to which individual appeals might be submitted, but only after an attempt for a local solution to the problem by the concerned county medical society has proved to be unacceptable to either the hospital or to the individual practitioner.

House of Delegates 1979
Amended, House of Delegates 1980

See also *Hospital Medical Staff Criteria*

HANYS POSITION STATEMENT ON DISPLACED PHYSICIANS

Background

Since January, 1975, over 30 hospitals in New York State have closed. During the same period a number of obstetrical and pediatric units of hospitals have also closed. Currently, there is a trend toward hospital mergers, consolidations, and shared clinical programs.

Whenever a hospital service or entire hospital is closed, there is a possibility that a physician, or physicians, will be deprived of access to a hospital by that action. It has happened in the past, and in all probability will happen more frequently and in larger numbers with future actions.

Issue

In cases where physicians from hospitals that have closed in whole or part apply for appointment at a neighboring hospital, reviews of their applications have not always been objective. It has been shown, in a few significant cases, that the recommendations of the review committees were based more on fear of competition than on the character, competence, and qualifications of the applicants.

It is clear that the livelihood of many physicians is dependent on their ability to secure hospital appointments and be granted hospital privileges based on objective review. Not so apparent, but more important, is the right of the patients of those physicians to have access to hospital facilities when medically necessary and appropriate through the physician of their choice.

Action

The Hospital Association of New York State urges its member hospitals, their boards of trustees, administrators, and medical staffs to review and monitor their appointment and credentialing procedures to assure they are sensitive to the needs of the displaced physician and his patients. Hospital boards must exercise their responsibilities to their hospitals to assure the competence of the medical staff through objective appointment and credentialing procedures. They must also exercise their responsibility to the larger community and see that qualified physicians have hospital appointments and their patients are afforded equal access to hospital services.

(Note: Appointment of certain traditionally hospital-based specialists, such as radiologists and pathologists, may need to be made on the basis of hospital need as well as qualifications.)

Adopted HANYS Board of Trustees October, 1978

PHYSICIAN REPRESENTATION ON HOSPITAL GOVERNING BOARDS

The Medical Society of the State of New York recommends that to insure the delivery of quality medical care to the hospitalized patient at the lowest possible cost it is incumbent upon hospitals to have a physician member representing the medical staff on its governing board (Board of Trustees, Board of Managers, etc.). Physicians, by virtue of their experience and training, are best able to assist other members of the governing board in developing priorities regarding medical services.

Privately practicing physicians from the community served by the hospital, elected or appointed by the medical staff to the board, and serving in a capacity equal to all other members of the board will provide the most effective form of liaison between the medical staff and the board.

COUNCIL 12/16/76

HYPNOSIS

Hypnosis is a medical procedure which should only be used by qualified physicians. The Medical Society of the State of New York believes there is great potential for its abuse by unqualified persons.

HOUSE OF DELEGATES 1964

INDEPENDENT PRACTICE OF MEDICINE

The Medical Society of the State of New York, in the public interest, opposes the independent practice of medicine by any individuals who have not completed the presently prescribed education and the examination for licensure for the practice of medicine; and furthermore has taken the position that the independent practice of medicine remain under the authority and control of the Board of Regents as assisted by the New York State Board for Medicine.

BASED ON HOUSE OF DELEGATES RESOLUTION 82-1

LICENSURE

At the present time there is no official State Society policy as to the requirement of licensure as a prerequisite for membership in the county or State medical societies.

COUNCIL 12/16/76

LITIGATION

GUIDELINES TO BE FOLLOWED BY COUNTY MEDICAL SOCIETIES IN REQUESTING FINANCIAL ASSISTANCE FROM THE MEDICAL SOCIETY OF THE STATE OF NEW YORK IN CONNECTION WITH LEGAL FEES FOR LITIGATION OR ADMINISTRATIVE HEARINGS CONCERNING THE COUNTY MEDICAL SOCIETY OR ITS MEMBERS

The following policies shall govern the administration of the MSSNY legal fee aid plan:

1. The County Medical Society shall promptly advise the Executive Vice-President of the contemplated litigation or administrative hearing giving full details of the matter involved.
2. The County Medical Society shall give an estimate of the amount of legal fees involved and a specific request for the financial assistance requested.
3. Aid will be provided for legal fees only in matters clearly redounding to the benefit of the Medical Society of the State of New York and its membership at large.
4. The final decision as to whether legal fee aid will be granted will be made by the Council of the MSSNY with the concurrence of the Board of Trustees.
5. In the event that MSSNY wishes to participate in legal action initiated by a county medical society, it shall be understood that there may be a requirement for county medical societies to participate financially.

COUNCIL 11/20/80
AMENDED BY COUNCIL 4/16/81

LIVING WILLS

As to the question of "living wills," the Medical Society of the State of New York has adopted the following position:

1. The concept of an agreement between a patient and his doctor on how best to work out the treatment patterns of a terminal illness is valid.
2. Whether this concept should be embodied in a written document signed by doctor and patient, is open to question. The Medical Society of the State of New York feels at this time that such a contract will create a rigid and arbitrary agreement seriously affecting the doctor-patient relationship negatively.
3. Any legislation authorizing "living wills" further solidifies the danger of locked-in positions and the possibility of the irreversibility of a prior decision because the patient is incapable of informed rescission. The Medical Society of the State of New York now feels that statutory permission will exacerbate the uncertainties of this very delicate situation rather than clarify the matter.

Therefore it is our present recommendation that the entire matter of how best to treat the terminally ill patient should rest on a privileged verbal communication between a patient and the physician responsible for care. Should the Legislature seek to enact law pertinent to this problem, the Medical Society of the State of New York has taken the position that support of such a measure should be avoided but outright opposition is not indicated.

COUNCIL 4/27/78

See also *EUTHANASIA*

MANPOWER ASSISTANCE

The Medical Society of the State of New York supports the concept of continuing some form of federal manpower financial assistance and support, including general institutional grants, special project grants for medical schools, and the continuation of the National Health Service Corps and other support mechanisms such as long-term, low-interest loans for medical students.

COUNCIL 6/26/80

MEDICAID

The position of the Medical Society of the State of New York is that all Title XIX (Medicaid) recipients must have equal access to high-quality health care along with freedom of choice as to the source from which they receive such care.

This quality care should be delivered in an efficient manner by appropriately recognized and varying alternative mechanisms of medical care delivery.

Reimbursement for medical services rendered to Title XIX (Medicaid) patients must be based on a realistic fee pattern, in keeping with current economic realities and with the physician mode of practice. Such fee patterns must be subject to periodic adjustments in the same manner as are all other recognized alternative mechanisms of medical care delivery.

Further, there should be a:

1. Return of Medicaid patients to the offices of practicing physicians by revising the New York State Medicaid fee schedule to provide usual and customary fees, or to implement a realistically higher fixed fee schedule.
2. Well developed peer review system, administered by physicians at the local level and providing for an adequate appeals mechanism through physician ombudsmen.
3. Development of a program that would provide incentives to physicians for locating in underserved areas.
4. Unification of administrative and fiscal Medicaid responsibilities within a *single* Department at the State level.

Council 4/22/82

MEDICAL DATA

MEDICAL DATA CONFIDENTIALITY

The Medical Society of the State of New York strongly opposes the identification of patients by name unless the patient is informed of the fact that the medical data relating to him or her will be provided to a data bank, and for the purpose it will be used.

Based on House of Delegates Resolution 78-65

A complete set of Ethical Guidelines for Data Centers Handling Primary Medical Records is available, upon request, at the Society headquarters in Lake Success.

MEDICAL RECORDS — RELEASE OF

Section 17 of the Public Health Law — Release of Medical Records:

Upon the written request of any competent patient, parent, or guardian of an infant, or committee for an incompetent, an examining, consulting or treating physician or hospital must release and deliver, exclusive of personal notes of the said physician or hospital, copies of all x-rays, medical records, and test records including all laboratory tests regarding that patient to any other designated physician or hospital, provided, however, that such records concerning the treatment of an infant patient for venereal disease or the performance of an abortion operation upon such infant patient shall not be released or in any manner be made available to the parent or guardian of such infant. Either the physician or hospital incurring the expense of providing copies of x-rays, medical records, and test results including all laboratory tests pursuant to the provisions of this section may impose a reasonable charge to be paid by the person requesting the release and deliverance of such records as reimbursement for such expenses.

For the purposes of this section the term "laboratory tests" shall include but not be limited to tests and examinations administered in clinical laboratories or blood banks.

STATEWIDE PLANNING AND RESEARCH COOPERATIVE SYSTEM (SPARCS) PROGRAM

The Medical Society of the State of New York approves of any program that secures statistically valid data which can be used in determining how health care is delivered in New York State. We take exception, however, to any procedure which might violate patient/physician privacy and confidentiality.

We agree with the basic principle of SPARCS as a research mechanism for obtaining data for determining and developing information concerning the delivery of health care to our residents at reasonable cost. It, therefore, concurs with the stated objectives of SPARCS as being a "comprehensive, centralized hospital data system which includes hospital stay information, billing information, and hospital financial information. Its purpose is to establish a data base which will contribute to the State's goal of providing high-quality medical care to all New York residents at reasonable cost. Information from the system will be used for studies of hospital financing and reimbursement, for investigation of hospital fraud and abuse, utilization review and review of quality of care, for health planning and resource allocation studies, and for identification of areas of prevalence of disease, high mortality and high morbidity."

The Medical Society of the State of New York takes exception to any data collection mechanism that interferes with the patient/physician relationship by identifying either the physician or the patient. SPARCS should not be a device to obtain information that would be ultimately used to determine if and when punitive action could be taken. If, after evaluation of available data, it is obvious that there are other areas where it becomes necessary that material be gathered for studies related to physicians and their patients, the request for additional information should entail collaborative efforts on the part of the Medical Society of the State of New York and the New York State Department of Health and the Office of Health Systems Management.

The Medical Society of the State of New York feels the inclusion of individual patient/physician data is not necessary for the compilation of the required information and, therefore, serves no purpose in being included as a data element. Individual physician and patient identifiers must not be utilized by this system in order not to violate the confidentiality and privacy that exists between such physicians and patients.

Until such time as those two specific data elements can be removed, the Medical Society of the State of New York cannot support this particular data system.

Council 11/15/79

MEDICAL EXAMINER'S SYSTEM — FORENSIC MEDICINE

The Medical Society of the State of New York feels that the Medical Examiners System should be extended on a regional basis throughout the State to replace any existing Coroner Systems; and that the Medical Examiner's Office should be an entirely independent unit of government with a direct line of responsibility in a municipality to the mayor, who should not delegate his responsibility to the appointee of another agency.

Any funding for Medical Examiner's Offices available from the State should be paid to the city or county government and earmarked for the Medical Examiner's Office and not diverted to other agencies' nonrelated needs.

House of Delegates 1980

MENTAL HYGIENE PROGRAMS

There has been a fragmentation of services available to the mentally disabled, between State, county, and local programs. This has produced duplicative delivery and a tendency toward an uncoordinated approach to treatment. The result has been either wasteful or dysfunctional, leading to the "Long Beach Syndrome" or "Revolving Door" patient care.

The Medical Society of the State of New York takes the position that all State mental health services for the mentally disabled should be within a single organizational component under the direction of a qualified psychiatrist with authority over all the administrative and program elements of these services. This is in accord with the position of the American Psychiatric Association.

Any program must include a department of mental hygiene with authority over and direct input into all health delivery services. There should be a hierarchy of structure encompassing community mental health centers at the local level, halfway houses for those recently discharged, guidance clinics, and hospital facilities comprising both acute and chronic care beds. All this should function in a smooth transition from hospital inpatient care to follow-up clinics with continued, closely monitored supervision.

Community and consumer participation is desirable but should be advisory rather than directive. All local services should be under the jurisdictional surveillance of the State mental health department. The entire delivery system should be a quasi-independent body free of undue interference from the legislative and executive departments of government.

NATIONAL HEALTH INSURANCE

The Medical Society of the State of New York endorses the concept of Comprehensive Health Insurance for all including both basic and catastrophic benefits. Such benefits must be all inclusive and be available with parallel coverage in both the private practitioner's office and in the institutional setting. The program should be based on the fundamental principle that the integrity of the physician–patient relationship must be maintained and that both the physician and the patient be guaranteed the freedom to exercise his/her own best judgment as to the delivery and the receipt of such medical care.

The program should be administered primarily in the private sector thru the use of private health insurance with government participation being limited essentially to assisting the poor and low-income individuals to pay health insurance premiums. Within their administrative area there should be alternate methods of medical care delivery that have been shown to be cost effective.

The financing of such a program should be in the private sector and must be predicated on a cost-sharing basis which will take into consideration Employer-Employee funding plans as well as governmental plans where recipients fall into the categories of the indigent, nonemployed, self-employed, and the elderly. The program should establish *uniform* benefit coverage for all persons with plans for coverage continuation when individual conditions suddenly change. To further enhance fiscal integrity there must be a mandated system of coinsurance and deductibles scaled to various categories of individual incomes with a set expenditure cap above which catastrophic coverage will begin.

It is the further position of the Medical Society of the State of New York that:

a) Licensure and certification of Health Manpower should remain a State-Level responsibility.

b) Peer Review should be an integral part of the program recognizing the use of multiple methods for such review.

c) Cost-effective methodology must be established which takes into consideration a reasonable reimbursement formula without sacrificing quality care. This may require multiple plans.

d) There should be a coordination of benefits program, and lastly

e) Flexibility of plans for promoting cost effectiveness in the delivery and financing of medical care is acceptable, but such flexibility must not compromise Quality Care.

The above position of the Medical Society of the State of New York is not inconsistent with the four basic principles of the American Medical Association.

Based on 1978 House of Delegates Position
and Council Position 11/81

ROLE OF NONPROFESSIONALS IN SURGERY AND OPERATING ROOMS

1. With the exception of a licensed health professional whose contact shall be limited to activity within the statutorily defined scope of practice of that particular licensed health profession, under no circumstances should a nonphysician have any direct contact with a patient undergoing surgery in the operating room.

2. No licensed physician should utilize any device without first becoming fully familiar with its properties and the proper procedures to be followed with respect to its inclusion in any operative procedure.

3. The best interests of the patient will be served if technically expert representatives of equipment manufacturers are available for consultation in connection with an operation. Such availability shall be for the sole purpose of providing the physician with expert technical advice in the event that the device in any way malfunctions.

The Medical Society of the State of New York does not in any way condone and, indeed, affirmatively condemns any direct interaction between a nonphysician, other than a licensed health professional acting within statutorily defined areas of capability, and a patient.

This statement does not preclude the presence of legally assigned medical students, as well as students of paraprofessional occupations who are duly enrolled in the accredited programs of teaching and affiliated hospitals.

Council 1/26/78

NURSING

The Medical Society of the State of New York and the New York State Nurses Association recognize the increasing knowledge, expertise, and responsibility of the medical and nursing professions. As health science and technology have advanced, practitioners of both disciplines have incorporated new tools, techniques, and therapeutic measures into their practices. The utilization of particular diagnostic and therapeutic tools by nurses and physicians is determined by the distinctive education and scope of practice of the respective professions.

Although it is obvious that patients have distinct medical and nursing needs it must be recognized that there are areas of practice common to both professions. It is essential that the traditional cooperative relationship of the physician and nurse be maintained. To assure this principle, the parameters of overlapping or common areas of practice must continue to be determined by the medical and nursing professions.

Both societies agree that there is no need for amendments to either the Nurse Practice Act or the Medical Practice Act. Such action is unnecessary for the following reasons:

1. The promulgation of a list of "Medical Acts" would be totally impractical. Creation of such a list would ignore differences in various areas of the State and various types of institutions. Any additions or deletions would require separate legislative acts.
2. The medical profession has established methods for setting standards in various specialties. Physicians must be qualified in respect to training, experience, and capability before being recognized as specialists. The nursing profession has also developed and continues to strengthen mechanisms for regulating the preparation and practice of nurses. Such systems have functioned as efficient safeguards for the public and have not, in the past, required legislative action.
3. The State Education Department already has statutory responsibility to promulgate regulations required to implement articles of the Education Law for each profession. Such regulations could be more effectively accomplished through advice from the appropriate professional organizations than through restrictive legislation.

Therefore, the two societies have established a Joint Practice Commission, composed of representatives of the Medical Society of the State of New York and New York State Nurses Association. This Commission is charged with defining areas of practice common to both professions and establishing guidelines for interdisciplinary practice of physicians and nurses. Such guidelines are similar to joint position statements developed by these organizations in the past and would serve to advise and assist the Commissioner of the Department of Education.

Council 12/16/76

Addendum to Position Paper on Nursing

The Council of the Medical Society of the State of New York on March 23, 1978, reiterated its opposition to legislation which would increase the scope of nursing practice so as to blur the distinction between nursing and medical practice.

NURSE PRACTITIONERS

The Medical Society of the State of New York opposes the concept of any legislation which would legally permit nurse practitioners to set up an independent practice of medicine as defined by diagnosis, treatment and prescription writing.

Council 4/22/82

See also *Independent Practice of Medicine*

OBSTETRICS

GENETIC DEFECTS — PHYSICIAN RESPONSIBILITY TO INFORM PATIENT (See page 656)

OUT OF HOSPITAL DELIVERIES

Labor and delivery, while a physiologic process, clearly presents potential hazards to both mother and fetus before and after birth. These hazards required standards of safety which are provided in the hospital setting and cannot be matched in the home situation. We recognize, however, the legitimacy of the concern of many that the events surrounding birth be an emotionally satisfying experience for the family. We support those actions that improve the experience of the family while continuing to provide the mother and her infant with accepted standards of safety available only in hospitals which conform to standards as outlined by the American College of Obstetricians and Gynecologists and the American Academy of Pediatrics.

Council 10/25/79

PATIENTS' COMPLAINTS

Complaints against physician members are handled at the county medical society level. Any violation of the Medical Practice Act, the Constitution and Bylaws of the County Medical Society, the Bylaws of the Medical Society of the State of New York, or the Principles of Professional Conduct of the Medical Society of the State of New York, can lead to censure, suspension, or expulsion from membership.

Charges against a member physician must be submitted in writing to the county medical society secretary, who will furnish a copy to the accused and the chairman of the proper committee at once. The Committee will investigate the charges on the merits, and the accused physician will be given a reasonable time to file a written answer to the charges.

The Committee will then hold a hearing, at which the complainant, the accused, witnesses, and counsel may all be present and submit evidence, enter objections to evidence submitted by the other party, and call and cross-examine witnesses. The Committee may question the complainant, the accused physician, and witnesses. The Committee may accept any evidence deemed appropriate and pertinent.

A report of the hearing will be submitted by the Committee to the Medical Society. It should include a determination by the Committee that the charges be either sustained or not sustained, and a recommendation that the accused be (a) censured, (b) suspended, or (c) expelled.

A copy of this report shall be mailed to the accused physician, who may submit written objections to the report to the Medical Society. The report, and the accused physician's objections, if any, shall be on file at the Secretary's office and available to the membership.

The report and objections will be considered at a properly announced meeting of the membership. The accused may also request permission to present oral arguments. The granting of permission is discretionary with the president of the Medical Society.

The membership shall vote to determine the decision of the county medical society. Censure or suspension shall require a two-thirds vote of the members present and voting. A three-fourths vote of the members present and voting shall be required to expel a member.

The accused may request to be furnished, at his own expense, a copy of the recording or transcript which must be made of the Committee hearing and the meeting of the membership.

The accused physician has the right to appeal the decision of the county medical society to the Judicial Council of the MSSNY and to the Judicial Council of the AMA (if the accused is a member of the AMA) under such rules as these two bodies may adopt. However, the disciplinary actions voted by the county medical society shall remain in full force and effect during the pendency of such appeal or appeals.

COUNCIL 1/27/77

PEER REVIEW

The Medical Society of the State of New York, along with the AMA, endorses peer review that is physician controlled and is applicable to all patients and not just specific groups as currently exists; continual development and promotion of new procedures for physician assessment of the quality and efficiency of medical care must be sought. This development and assessment can best be accomplished by organized physician groups at the local level regardless of funding source. The local review approval by local physician-sponsored organizations must be coordinated on a statewide level, keeping always in mind that physician-controlled peer review through locally sponsored physician organizations is the basis for effective peer review.

It is, therefore, the position of the Medical Society of the State of New York that the State Society should coordinate and assist in implementing mechanisms for peer review for all patients and that such coordination will insure the review being done by physicians at the local level.

HOUSE OF DELEGATES 1981

The Medical Society of the State of New York is committed to taking a leadership initiative in establishing a statewide peer review mechanism, either within its own capabilities or as a contracting agent.

BASED ON HOUSE OF DELEGATES RESOLUTION 82-21

PHYSICIAN'S ASSISTANT

The Medical Society of the State of New York (MSSNY) defines a physician's assistant as "a skilled person qualified by academic and practical training to provide patient services under the supervision and direction of a licensed physician who is responsible for the performance of that assistant."

The MSSNY strongly endorses the concept of innovation and experimentation in developing new categories of health manpower.

MSSNY supports the development of a certification examination for the assistant to the primary care physician. This will help ensure orderly development of the "physician's assistant" concept under medical guidance, thereby helping to assure the maintenance of high standards.

The MSSNY opposes employment of physician's assistants by hospitals. Direct responsibility to and supervision by a physician is a critical element in the safe and effective performance of a physician's assistant. A physician's assistant should not function in that capacity when employed and paid by a hospital or a full-time, salaried, hospital-based physician.

The MSSNY recommends a holding action on licensure of any additional allied health occupations until long-term solutions are developed. Such a moratorium is needed in order to forestall perpetuating a system of narrowly defined, legally circumscribed health service roles and permit time for coordinated development of practical alternatives.

Because of different patterns of practice from one locality to another, questions involving the duties and supervision of specific categories of allied personnel can best be resolved at State and local levels.

COUNCIL 12/16/76

Addition to Position Paper on Physicians' Assistants

It is further recommended that a system be evolved to assure firmer controls of the training, supervision, and utilization of physicians' assistants.

The Medical Society of the State of New York is constantly evaluating the position of physicians' assistants and the effect on the delivery of health care in New York State, and is attempting to control the activity of such physicians' assistants in order to avoid abuse.

SERVICES PERFORMED BY PHYSICIANS' ASSISTANTS

Services performed by physicians' assistants should not be payable unless such services are rendered under the *direct* and *personal* supervision of the physician.

COUNCIL 6/26/80

PHYSICIAN DISTRIBUTION

The MSSNY recognizes that a shortage of available medical professionals exists in several locales within the State, and therefore supports efforts to encourage communities to acquire the necessary medical manpower to serve its citizens. The MSSNY has called upon its 61 component county medical societies to work with communities within their areas to resolve the problem of maldistribution of medical practitioners.

Experience indicates that no single approach will solve the health needs of every community but careful review of some solutions will surely benefit those communities having problems in obtaining appropriate health care delivery for its citizens. It is the responsibilitity of the local rural or urban community to secure the necessary information on health care requirements and manpower availability and provide health education with emphasis on utilization of health services by its citizens.

COUNCIL 12/16/76

The Medical Society of the State of New York has completed a Demographic Survey of Physicians in New York State which is available for reference at the Headquarters Office of the Society in Lake Success, New York.

PROFESSIONAL LIABILITY

The problem of professional liability litigation and insurance has resulted from a significant increase in the number and size of claims against physicians and other health care providers. This phenomenon has not only increased the cost of health care services for patients, but has also threatened the availability of such care due to a lack of adequate professional liability insurance coverage.

The basic cause of any malpractice case is some injury to the patient. Once sustained the question arises whether the injury was caused by the negligence of the health care provider or was the result of some uncontrollable circumstance. In some cases, unforeseen complications will develop which are the natural outcome of the treatment administered to the patient and not the result of negligent treatment by the physician. There are also instances when total recovery cannot be achieved regardless of the treatment used. In addition, there may be adverse results which occur simply because of the patient's physical makeup, his lack of response to certain treatments or his unwillingness to care for himself and follow the doctor's orders. In each of these cases, there is no malpractice.

It is generally recognized that litigation in the area of malpractice is a social problem as well as a medical-legal problem. People are more suit-conscious today, and are aware of the existence of liability insurance and presence of a large sum for payment of claims. However, they mistakenly believe that it is the insurance company, and not the public, who ultimately pays these claims. The medical profession believes that this propensity toward litigation to solve our grievances is one of the major causes of the present malpractice crisis.

What the medical profession seeks in its search for a solution to this problem is fairness for both the patient and the physician. Doctors have no interest in trying to deprive any patient injured by a negligent act from recovering compensation for the damages he has sustained. What the profession is interested in is discouraging unwarranted suits and encouraging the just and rapid settlement of legitimate claims.

As a result of this changing social and legal climate, the present tort law/liability insurance system has been incapable of handling the professional liability problem. In studying the various elements of this system, the Medical Society of the State of New York has recognized three main areas which require corrective action:

1. Objectivity in the decision-making process.
2. Expeditious handling of cases.
3. Realistic guidelines for compensation.

To correct the shortcomings and inequities in the present litigation system, the Medical Society of the State of New York advocates the creation of an administrative system in which professional medical liability cases would be decided by a panel of medical and legal experts, liability would be determined in accordance with established criteria, and compensation would be awarded for the actual losses which the claimant has sustained.

COUNCIL 12/16/76

PROTEIN SUPPLEMENTS

The Medical Society of the State of New York is of the opinion that the use of high protein food supplements is contraindicated for the purpose of weight reduction and reiterates its warning that high protein formulae not be used in weight reduction programs.

COUNCIL 6/21/79

QUACKERY

From the very beginning of its existence, the Medical Society of the State of New York has fought health quackery in order to protect the health of our people and to promote the highest quality of medical care.

The Medical Society of the State of New York, wherever possible, must expose and attempt to eradicate unscientific cultists, nostrums, false claims for therapeutic advices and treatment, diploma mills, food fadism, medical imposters, and all types of pseudo-healing.

The Principles of Professional Conduct of the Medical Society of the State of New York declare that a sectarian or cultist, as applied to medicine, is one who alleges to follow or in his practice follows a dogma, tenet, or principle based on the authority of its promulgator to the exclusion of demonstration and scientific experience. All voluntarily associated activities with cultists are unethical. A consultation with a cultist is a futile gesture if the cultist is wrongfully implied to have the same high grade of knowledge, training, and experience as is possessed by the doctor of medicine. Such consultation lowers the honor and dignity of the profession in the same degree in which it elevates the honor and dignity of those who are irregular in training and practice.

COUNCIL 12/16/76

REHABILITATION IN SKILLED NURSING FACILITIES

The patient's need for rehabilitation services is one of the two primary bases for the admission and acceptance of eligible patients under Medicare and Medicaid in an approved skilled nursing facility. Little attention has been paid to the standards and criteria by which the quality of this care can be evaluated in terms of medical audit. Many patients are admitted, on the basis of need for rehabilitation services, to skilled nursing facilities that do not provide adequate programs. The comprehensive rehabilitation services to which these patients are entitled by law appear to be determined to be provided if there is a physicial therapist providing some physical therapy services on a part-time, or full-time basis. This is manifestly inadequate.

If the need for comprehensive rehabilitation services is to be met, each institution that accepts patients on this basis must document the fact that comprehensive rehabilitation services are available, and have been provided when prescribed. In particular, each such admission must have a comprehensive rehabilitation evaluation or assessment which starts with the services of a physician who has training in this specialty field of medical care. This physician need not be a Diplomate of the American Board of Physical Medicine and Rehabilitation, although this would certainly seem desirable. However, the medical staff organization should provide for a physician who has had training and demonstrated interest in this field and who has accepted the responsibility for providing rehabilitation evaluation of new patients to the facility, and for providing leadership to the other members of the rehabilitation team from the various disciplines. In those cases where the attending physician wishes to maintain primary responsibility for the comprehensive rehabilitation evaluation, interaction with the rehabilitation team members, formulation of the group decisions including goals, prescription of the specific program, and reevaluations, this may be provided for in the medical staff rules and regulations. The consultant in rehabilitation medicine would then have responsibility for seeing that these functions are performed and documented. In most situations it would appear more appropriate for the rehabilitation medicine consultant to provide these functions for the attending physician on referral. There must be written documentation of the rehabilitation conference, the goals, prognosis, anticipated length of trial, prescription of the therapeutic program, results of reevaluations, and discontinuation of therapy when deemed no longer feasible. The rehabilitation medicine consultant must be in a position to prescribe braces, prostheses, and other assistive devices, including appropriate wheelchairs as indicated. Unless an appropriately trained physician has been so designated, and has accepted, and is performing this function on a regular basis, the extended care facility cannot be considered to be providing for the comprehensive rehabilitation needs of the patients.

The directives from Washington and the interpretation by State officials and inspectors have done little to properly see that capital "R" Rehabilitation programs are developed in these facilities. In fact, it has been brought to our attention in New York State that facilities have been advised that a physician in this role is not necessary, as long as there is a part-time or full-time physical therapist on the staff. This shows a complete misunderstanding of the place of rehabilitation medicine in the spectrum of comprehensive health care. This is particularly important because the skilled nursing facility is one of the primary loci in the continuum of health care services in which the rehabilitation needs of patients can be met. If the patient with rehabilitation potential must be discharged from the acute general hospital, and a rehabilitation center is not available, then capital "R" Comprehensive Rehabilitation in the skilled nursing facility is mandatory. The recognition of this responsibility was clearly in the minds of the Congress when these provisions were enacted. It is high time that the medical profession developed positive recommendations to see that this serious gap is corrected.

Council 6/8/78

SACCHARIN

The Medical Society of the State of New York is totally opposed to any ban on the use of saccharin, especially since there is no other sugar substitute available.

Council 11/17/77

SAFETY REGULATIONS FOR MOTORCYCLE OPERATORS

It is the position of the Medical Society of the State of New York that the New York State Legislature should make the wearing of helmets mandatory for operators of motorcycles, trail bikes, mopeds, and similar motorized vehicles and that the New York State Legislature should take action to require that all motorcycle operators, including operators of trail bikes, mopeds, and similar motorized vehicles, meet State regulations concerning the age of the operator, operational skills, and safety standards, including helmet provisions.

House of Delegates 1978

SECOND OPINION

It is a time-honored practice of the medical profession for physicians to request consultations when the patient's condition merits it. Reputable physicians never refuse a patient's request for consultation.

In regard to the current popular demand for "second opinion" programs, the Medical Society of the State of New York believes that such programs should always be voluntary, without any pressure on the patient, either subtle or overt, and that when sponsored by a third-party payer there should be no added cost to the patient. Physicians selected for consultation should be from an open and not a closed panel and the consultant used for the "second opinion" should not take over the care of the patient.

Publicity material regarding "second opinion" programs should be factual and not instill fears in the patient or imply distrust of the medical profession.

Council 5/17/79

SICK OR IMPAIRED PHYSICIAN

At its House of Delegates Meeting in 1976 the Medical

Society of the State of New York adopted a set of guidelines for hospitals to use in handling staff physicians who are sick or impaired. The guidelines can be used in setting up procedures and in writing or amending staff bylaws.

The guidelines will be provided to hospitals or medical societies by MSSNY upon request.

See also *ALCOHOLISM*

SMOKING

The Medical Society of the State of New York has adopted a series of resolutions relative to smoking.

The Medical Society of the State of New York, on May 24, 1973, approved and supported the concept of smoking clinics, which are organized and publicized through appropriate voluntary health agencies, and have public health support and participation of physicians and health professionals.

In January of 1974 the Medical Society of the State of New York approved the use of "No Smoking" signs in MDs offices on a voluntary basis.

The Council of the Medical Society of the State of New York on November 30, 1978, approved the following:

— Support of the principle that smoking in public places be limited to certain designated areas.

— Urged hospital authorities to take steps to remove cigarette vending machines and the sale of cigarettes from their premises, since this is totally inconsistent with a hospital's mission to protect the public health and is not in keeping with its standing as a symbol thereof.

— Indicated its support of current national efforts to reduce the habit of smoking and charge those of its committees which have a responsibility in the area to review their potential contribution to the control of this public health problem, including those with a special concern for the young.

UNIVERSAL CODE FOR REPORTING MEDICAL SERVICES

The Medical Society of the State of New York has accepted and recommends to its members "The Physicians' Current Procedural Terminology" (CPT-4) as currently revised and published by the AMA. It is initiating appropriate actions necessary to require all private and governmental third party payors, carriers, and/or contractors doing business in New York State to adopt the CPT-4, as currently revised, as the only and universally accepted procedural coding systems as of December 31, 1983.

BASED ON HOUSE OF DELEGATES RESOLUTION 82-26

See also *HEALTH INSURANCE CLAIM FORMS*

UNPROFESSIONAL CONDUCT

Unprofessional Conduct is defined under the New York State Board of Regents Rules as published in the October, 1977, issue of the *New York State Journal of Medicine* and amended by the Board of Regents in October, 1978.

The Office of the General Counsel of the Medical Society of the State of New York should be consulted for specific information on any aspects of the Board of Regents Rules.

See also *PRINCIPLES OF PROFESSIONAL CONDUCT*

WORKERS' COMPENSATION FEES — REGIONALIZATION OF

The Medical Society of the State of New York disapproves fixed fee schedules and seeks the adoption of payments based on usual, customary, and prevailing fees in all negotiations relating to fees where such negotiations are mandated by governmental agencies.

HOUSE OF DELEGATES 1980

WORKERS' COMPENSATION FIXED FEE SCHEDULES

The Medical Society of the State of New York deplores the use of fixed fee schedules in Workers' Compensation for physician reimbursement and is taking appropriate steps to work for the establishment of a fee reimbursement system based on usual, customary, and prevailing physicians' fees.

BASED ON HOUSE OF DELEGATES RESOLUTION 82-66

MEDICAL SOCIETY OF THE STATE OF NEW YORK
ORGANIZED 1807

PRINCIPLES

of

PROFESSIONAL CONDUCT

AMENDED 1982

REPRINTED 1983

MEDICAL SOCIETY OF THE STATE OF NEW YORK
420 LAKEVILLE ROAD
LAKE SUCCESS, NEW YORK 11042

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THE PRINCIPLES OF PROFESSIONAL CONDUCT

CHAPTER I

General Principles

Section 1: The prime object of the medical profession is to render competent medical service with compassion and respect for human dignity.

Section 2: These principles of professional conduct shall apply to doctors of medicine as individuals or as members of staffs of hospitals, clinics, colleges, schools, foundations, companies, partnerships, corporations or groups, by whatsoever name they may be known.

Section 3: The medical profession should safeguard the public and itself by exposing those physicians deficient in moral character or professional competence or who engage in illegal or unethical conduct.

Section 4: A doctor of medicine shall respect the rights of colleagues.

Section 5: Doctors of medicine should strive continually to improve medical knowledge and skill. They can promote the health of their community by their contributions and by cooperating with the proper authorities in the administration of sanitary laws and regulations.

Section 6: Any conduct that results in the provision of unnecessary services or overutilization of services or facilities is unethical.

CHAPTER II

Specific Principles

Section 1: A doctor of medicine is free to choose whom he will serve, except in the case of an emergency.

Section 2: Once having undertaken a case, the doctor of medicine should not neglect the patient nor should he withdraw from the case without giving adequate notice to the patient and/or relatives or guardian.

Section 3: The doctor of medicine should safeguard the patient's confidences within the constraints of the law.

Section 4: Doctors of medicine should request consultations when necessary or upon request of patient and/or family.

Section 5:

a) The acceptance of rebates on prescriptions or appliances or of commissions from attendants who aid in the care of the patient is unethical.

b) When a patient is referred by one doctor of medicine to another for consultation or treatment, the offering, giving, soliciting or receiving any fee or other consideration is unethical.

c) It is not unethical for a fee to be prorated among two or more doctors of medicine when such physicians have actively participated in the medical and/or surgical care of a patient and each physician's fee is commensurate with the services he had rendered. The patient who has received such joint services shall be advised of the participation of each physician and shall receive a separate, itemized statement from each.

Section 6:

a) The prescription or dispensing by a doctor of medicine of secret medicines or other secret remedial agents, of which he does not know the composition or the manufacture or promotion of their use, is unethical.

b) In owning a commercial medical facility for adjunct treatment purposes, a physician must keep the primary benefit of the patient in mind and such ownership should not result in overutilization for profit motives. Such ownership or participation must be approved by the local county medical society.

c) Drugs, remedies or appliances may be dispensed or supplied by the physician provided it is in the best interests of the patient or in areas where they are not available.

Section 7: A physician who has experienced problems with delinquent accounts may properly choose to request that payment be made at the time of treatment or add interest or other reasonable charges to delinquent accounts. The patient must be notified in advance of the interest or other finance or service charges by such means as the posting of a notice in the physician's waiting room or appropriate notations on the billing statement. The physician must comply with State and federal laws and regulations applicable to the imposition of such charges, i.e., the Truth in Lending Law.

Section 8: The attending physician should complete without charge the appropriate "simplified" insurance claim forms as a part of his service to the patient to enable the patient to receive his benefits. A charge for more complex forms may be made.

CHAPTER III

Advertising

The Medical Society of the State of New York does not prohibit the use of advertising when used in making certain information known to the public, provided that the communication shall not be misleading, shall not contain any false or misleading statements, and shall not deceive the public.

The public is entitled to know the names of physicians, their office hours, fixed fees for specified routine professional services, and biographical data which will enable people to make a more informed choice of a physician. The physician may furnish this information through the accepted local media for advertising, i.e., office signs, professional cards, dignified announcements, telephone directory listings, reputable directories, and news media, which are open to all physicians on like conditions.

Uninvited or in-person solicitation of actual or potential patients, who, because of their particular circumstances are vulnerable to undue influence, is unethical. Solicitation shall include:

1) The not always obvious devices of furnishing or inspiring, by use of public relations firms or the news media, comments concerning cases in which the physician, group or institution has been or is concerned;
2) the use of statements or claims intended or likely to create inflated or unjustified expectations of favorable results;
3) the use of statements or claims that are self-laudatory and imply that the physician's skills are superior to other physicians engaged in his field or specialty of practice.

CHAPTER IV

Contract Medicine

There are various financial or contractual arrangements that physicians may enter into. Medical care should not be subjected to lay interference on professional matters. The primary responsibility of physicians should be to the patients they serve.

Amendments or Alterations

Any component county medical society may adopt other or amend these regulations respecting professional conduct, binding only upon its own members if not inconsistent or in conflict with these Principles of Professional Conduct, or with the Bylaws of the Medical Society of the State of New York.

Enforcement, Discipline, and Punishment

Each component county medical society is charged with the duty of carrying out and enforcing, with its jurisdiction, the terms and provisions of these Principles of Professional Conduct. Any breach or infraction of any one or more of the terms or provisions of these Principles of Professional Conduct, or of any one or more of the terms or provisions of any further or additional regulations respecting professional conduct adopted as herein provided by any component county medical society, shall subject the offender to and shall be sufficient cause for discipline. Each component county medical society, through bylaws provisions adopted in accordance with its own constitution and bylaws and in accordance with the Bylaws of the Medical Society of the State of New York, shall (a) fix and determine the degree or degrees of discipline and the nature and extent of the penalty or punishment which may be imposed and shall (b) adopt its own rules and regulations of methods and procedure respecting all disciplinary investigations, proceedings, and action. Interpretations and rulings of each component county medical society with respect to these Principles of Professional Conduct or with respect to any further and additional regulations respecting professional conduct adopted by it as herein provided shall be binding upon its members until modified, revised, or reversed upon appeal by the Medical Society of the State of New York, or by a court of competent jurisdiction.

THE HIPPOCRATIC OATH, MAIMONIDES PRAYER, AND DECLARATION OF GENEVA ARE APPENDED TO THE PRINCIPLES OF PROFESSIONAL CONDUCT FOR HISTORICAL PURPOSES

APPENDIX

The Oath

I swear by Apollo the physician and Aesculapius and Hygeia and Panacea and all the gods and goddesses that according to my ability and judgment I will keep this Oath and this stipulation—to reckon him who taught me this Art equally dear to me as my parents—to share my substance with him and relieve his necessities if required—to look upon his offspring in the same footing as my own brothers and to teach them this Art if they shall wish to learn it without fee or stipulation—and that by precept, lecture, and every other mode of instruction, I will impart a knowledge of the Art to my own sons and those of my teachers and to disciples bound by a stipulation and oath, according to the Law of Medicine, but to none others.

I will follow the system of regimen which according to my ability and judgment I consider for the benefit of my patients and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to anyone if asked nor suggest any such counsel; and in like manner I will not give to a woman a pessary to produce abortion. With purity and with holiness I will pass my life and practice my Art. I will not cut persons laboring under the stone but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick and will abstain from every voluntary act of mischief and corruption, and further from the seduction of females or males, of freemen and slaves. Whatever in connection with my professional practice or not in connection with it I see or hear in the life of men which ought not to be spoken of abroad I will not divulge, as reckoning that all such should be kept secret.

While I continue to keep this Oath unviolated, may it be granted to me to enjoy life and the practice of the Art respected by all men in all times. But should I trespass and violate this Oath, may the reverse be my lot.

Hippocrates
(460–357 B.C.)

Prayer

I begin once more my daily work. Be thou with me, Almighty Father of Mercy, in all my efforts to heal the sick. For without Thee, man is but a helpless creature. Grant that I may be filled with love for my art and for my fellowmen. May the thirst for gain and the desire for fame be far from my heart. For these are the enemies of Pity and the Ministers of Hate. Grant that I may be able to devote myself, body and soul to thy children who suffer from pain.

Preserve my strength, that I may be able to restore the strength of the rich and the poor, the good and the bad, the friend and the foe. Let me see in the sufferer the man alone. When wiser men teach me, let me be humble to learn, for the mind of man is so puny and the art of healing is so vast. But when fools are ready to advise me or to find fault with me, let me not listen to their folly. Let me be intent upon one thing, O Father of Mercy, to be always merciful to thy suffering children.

May there never rise in me the notion that I know enough, but give me strength and leisure and zeal to enlarge my knowledge. Our work is great and the mind of men presses forward forever. Thou has chosen me in thy grace, to watch over the life and death of Thy creatures. I am about to fulfill my duties. Guide me in this immense work so that I may be of avail.

Maimonides
(*1135–1204 A.D.*)

Declaration of Geneva

At the Time of Being Admitted as Member of the Medical Profession:

I solemnly pledge myself to consecrate my life to the service of humanity.

I will give to my teachers the respect and gratitude which is their due.

I will practice my profession with conscience and dignity.

The health of my patient will be my first consideration.

I will respect the secrets which are confided in me.

I will maintain by all means in my power, the honor and the noble traditions of the medical profession.

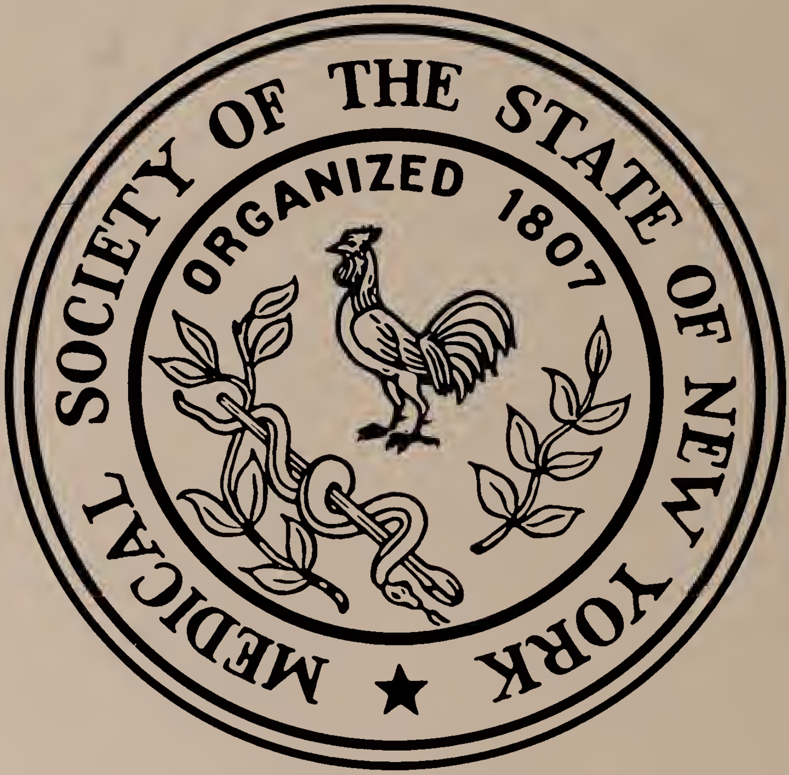
My colleagues will be my brothers.

I will not permit considerations of religion, nationality, race, party politics, or social standing to intervene between my duty and my patient.

I will maintain the utmost respect for human life, from the time of conception; even under threat, I will not use my medical knowledge contrary to the laws of humanity.

I make these promises solemnly, freely, and upon my honor.

Adopted by the General Assembly
of the World Medical Association
at Geneva, Switzerland, September, 1948.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APRIL 1983

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Requiem For PSRO
1972–1982

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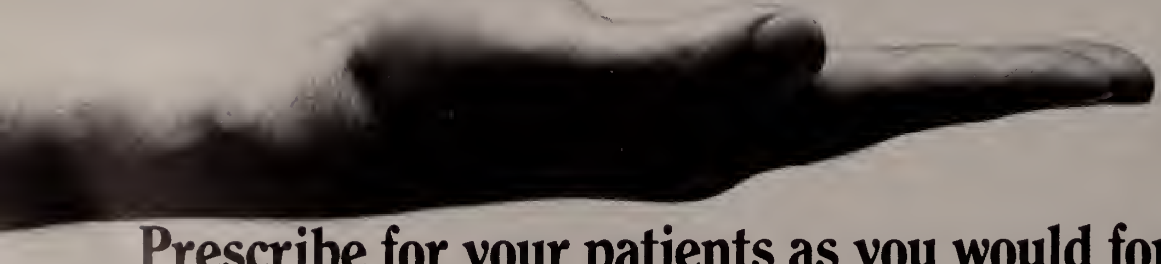

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New Consulting Editor of the *Journal*

Pascal James Imperato, M.D. is a specialist in preventive medicine and public health. After receiving his medical degree from the State University of New York, Downstate Medical Center in 1962, he completed his internship and residency in internal medicine at the Long Island College Hospital in New York City. In 1966 he received a masters degree in Public Health and Tropical Medicine from Tulane University's School of Public Health and Tropical Medicine. From 1966 to 1972 he was a medical epidemiologist with the Center for Disease Control of the United States Public Health Service, assigned to the West African country of Mali.

Beginning in 1972 he successively served in the New York City Department of Health as Director of the Bureau of Infectious Disease Control and First Deputy Commissioner, being appointed Commissioner of Health, and Acting Health Services Administrator in 1977. From 1977 to 1978 he also served as Chairman of the Board of Directors of the New York City Health and Hospitals Corporation. Since 1978, Dr. Imperato has been professor and chairman of the Department of Preventive Medicine and Community Health, State University of New York, Downstate Medical Center and adjunct professor of Public Health at the Cornell University Medical College.

From 1972 to 1978 he was an assistant attending physician in medicine at the New York Hospital. Presently he is an attending physician in medicine at the State University Hospital and Kings County Hospital, and an honorary attending physician in tropical medicine at the Long Island College Hospital.

Dr. Imperato is a Diplomate of the American Board of Preventive Medicine and a Fellow of the American College of Physicians. He has written numerous medical articles and several books, the most recent of which is *The Administration of a Public Health Agency* to be published this spring by Human Sciences Press of New York City. He is also an authority on Africa and its art.

CME 83

MEDICAL PRACTICE IN THE NUCLEAR AGE

These Professors and other outstanding speakers will be at the Medical Society of the State of New York's 1983 Annual CME Assembly, May 13–15, at the Rye Town Hilton.

◆

Harold L. Atkins, M.D.

Professor of Radiology and Director of Nuclear Medicine, State University of New at Stony Brook. *Annihilation, Coincidences and Scintillation: The Application of Nuclear Energy to the Diagnostic Process*

Victor P. Bond, M.D.

Associate Director for Life Sciences and Safety, Brookhaven National Laboratories, Upton. Professor of Medicine, State University of New York at Stony Brook. *Health Effects of Low Level Ionizing Radiation*

Alexander Leaf, M.D.

Chairman, Department of Preventive Medicine and Clinical Epidemiology and Ridley Watts Professor of Preventive Medicine, Harvard Medical School, Boston, Massachusetts

Francis L'esperance, M.D.

Associate Professor of Clinical Ophthalmology, Columbia University College of Physicians and Surgeons, New York City. *Ophthalmic Lasers: Instrumentation and Applications*

Richard Satran, M.D.

Professor of Neurology, University of Rochester School of Medicine and Dentistry, Rochester. *Vascular Headache: Migraine and Cluster Headache Syndromes*

Bennett M. Stein, M.D.

Byron Stookey Professor of Neurological Surgery, Columbia University College of Physicians and Surgeons; Director of Neurological Surgery, Columbia-Presbyterian Medical Center, New York City. *Surgical Treatment of Medial Hemispheric AVM's (Arterio Venous Malformations)*

Joseph P. Whalen, M.D.

Professor and Chairman, Department of Radiology, Cornell University Medical College; Radiologist and Chief, The New York Hospital, Cornell Medical Center, New York City. *Computerized Tomography of the Chest*

Lawrence A. Yannuzzi, M.D.

Surgeon Director in Ophthalmology, Manhattan Eye, Ear and Throat Hospital; Associate Clinical Professor of Ophthalmology, Cornell Medical School, New York City. *Krypton Laser Photocoagulation for Retino-Vascular and Macular Diseases*

◆

A highlight of the Assembly will be the General Session entitled "Medical Implications of the Nuclear Age". The 2½ days of Scientific Meetings will provide the individual physician with 18 credits out of a total of 75 Category I CME Credits being offered. Over 100 outstanding speakers, including 20 from out of state, will present papers at 26 sessions. Also, each program is acceptable for prescribed or personal interest credits by the American Academy of Family Physicians. See this issue of the Journal for the pre-registration form.

Thallium-201 perfusion scan showing left ventricle of patient with angina.

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CONTRAINDICATIONS

Propranolol hydrochloride is contraindicated in 1) bronchial asthma, 2) allergic rhinitis during the pollen season, 3) sinus bradycardia and greater than first degree block, 4) cardiogenic shock, 5) right ventricular failure secondary to pulmonary hypertension, 6) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol; 7) in patients on adrenergic-augmenting psychotropic drugs (including MAO inhibitors), and during the two week withdrawal period from such drugs.

WARNINGS

CARDIAC FAILURE Sympathetic stimulation is a vital component supporting circulatory function in congestive heart failure, and inhibition with beta blockade always carries the potential hazard of further depressing myocardial contractility and precipitating cardiac failure. Propranolol acts selectively without abolishing the inotropic action of digitalis on the heart muscle (i.e., that of supporting the strength of myocardial contractions). In patients already receiving digitalis, the positive inotropic action of digitalis may be reduced by propranolol's negative inotropic effect. The effects of propranolol and digitalis are additive in depressing AV conduction.

IN PATIENTS WITHOUT A HISTORY OF CARDIAC FAILURE, continued depression of the myocardium over a period of time can, in some cases, lead to cardiac failure. In rare instances, this has been observed during propranolol therapy. Therefore, at the first sign or symptom of impending cardiac failure, patients should be fully digitalized and/or given a diuretic, and the response observed closely. a) if cardiac failure continues, despite adequate digitalization and diuretic therapy, propranolol therapy should be immediately withdrawn; b) if tachyarrhythmia is being controlled, patients should be maintained on combined therapy and the patient closely followed until threat of cardiac failure is over.

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following *abrupt* discontinuation of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease, who are given propranolol for other indications.

IN PATIENTS WITH THYROTOXICOSIS, possible deleterious effects from long-term use have not been adequately appraised. Special consideration should be given to propranolol's potential for aggravating congestive heart failure. Propranolol may mask the clinical signs of developing or continuing hyperthyroidism or complications and give a false impression of improvement. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. This is another reason for withdrawing propranolol slowly. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

IN PATIENTS UNDERGOING MAJOR SURGERY, beta blockade impairs the ability of the heart to respond to reflex stimuli. For this reason, with the exception of pheochromocytoma, propranolol should be withdrawn 48 hours prior to surgery at which time all chemical and physiologic effects are gone according to available evidence. However, in case of emergency surgery since propranolol is a competitive inhibitor of beta-receptor agonists, its effects can be reversed by administration of such agents, e.g., isoproterenol or levarterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in restarting and maintaining the heart beat has also been reported.

IN PATIENTS PRONE TO NONALLERGIC BRONCHOSPASM (*e.g.*, CHRONIC BRONCHITIS, EMPHYSEMA), propranolol should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETICS AND PATIENTS SUBJECT TO HYPOGLYCEMIA Because of its beta-adrenergic blocking activity, propranolol may prevent the appearance of premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia. This is especially important to keep in mind in patients with labile diabetes. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

USE IN PREGNANCY The safe use of propranolol in human pregnancy has not been established. Use of any drug in pregnancy or women of childbearing potential requires that the possible risk to mother and/or fetus be weighed against the expected therapeutic benefit. Embryotoxic effects have been seen in animal studies at doses about 10 times the maximum recommended human dose.

PRECAUTIONS

Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if propranolol is administered. The added catecholamine-blocking action of this drug may then produce an excessive reduction of the resting sympathetic nervous activity. Occasionally, the pharmacologic activity of propranolol may produce hypotension and/or marked bradycardia resulting in vertigo, syncopal attacks, or orthostatic hypotension.

As with any new drug given over prolonged periods, laboratory parameters should be observed at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function.

ADVERSE REACTIONS

Cardiovascular: bradycardia, congestive heart failure, intensification of AV block; hypotension; paresthesia of hands; arterial insufficiency, usually of the Raynaud type; thrombocytopenic purpura. *Central Nervous System:* lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. *Gastrointestinal:* nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis. *Allergic:* pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress. *Respiratory:* bronchospasm. *Hematologic:* agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura. *Miscellaneous:* reversible alopecia. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been conclusively associated with propranolol. *Clinical Laboratory Test Findings:* Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

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Abstracts

Gerber LM, Madhavan S, Alderman MH: Coincident hypertension with hyperglycemia: deleterious effects on patients. ***New York State J Med 1983;*** 83:693.

To determine whether or not the occurrence of hypertension in patients with hyperglycemia increases the hazard of cardiovascular (CV) morbidity (stroke and myocardial infarction), the experience of patients having hyperglycemia with and without concomitant hypertension was examined. Charts of 1,369 patients making an initial visit to a general medical clinic in 1975 were reviewed. Of 129 hyperglycemic patients, 77 (59.7%) had high blood pressure. Although hyperglycemic patients with and without hypertension had similar demographic characteristics and similar proportions of clinical abnormalities, only patients with hypertension sustained stroke or myocardial infarction. When patients were stratified by number of initial risk factors, it was only hypertensive patients with one or more risk factors who experienced CV morbidity. These findings suggest that coincident hypertension in patients with impairment of glucose tolerance may significantly affect prognosis. Thus, accurate accessment of CV risk among patients with glucose intolerance can be made more reliably with an awareness of coincident disease status.

Barman, AA, Batiuchok, W, Creedon, JJ, and Anban, T: Carotid endarterectomy without temporary shunt: importance of pharmacologic control of blood pressure. ***New York State J Med 1983;*** 83:697.

In carotid endarterectomy, hyportension or sustained hypotension is an important factor in intraoperative and postoperative neurologic deficits. This is especially important in patients with known hypertension and severe degrees of stenosis of the internal carotid artery. The perfusion pressure distal to the stenosis is variable, unpredictable, and if noncompliant may result in hemorrhage if exposed to suddenly increased pressure head. Control of blood pressure, in our experience, has been the single most important factor in smooth intra- and postoperative courses.

Slack NH, Brady MF, Murphy GP: Prostatic carcinoma: treated at a categorical center 1970–1979. ***New York State J Med 1983;*** 83:699.

This report covers a decade of experience with prostate cancer from a series of 881 cases seen at Roswell Park Memorial Institute (RPMI) from 1970 to 1979; and is a continuation of previous reports from a series of 466 cases seen from 1950 to 1959, and 500 cases seen from 1960 to 1969. In this series, 69 diagnoses of prostate cancer were made at autopsy (62 were stage A_1), and 128 were diagnosed at RPMI. The majority (78%) were diagnosed elsewhere and were referred to RPMI for treatment. The patients diagnosed at RPMI were significantly older (67) than the referrals, who averaged 64 years.

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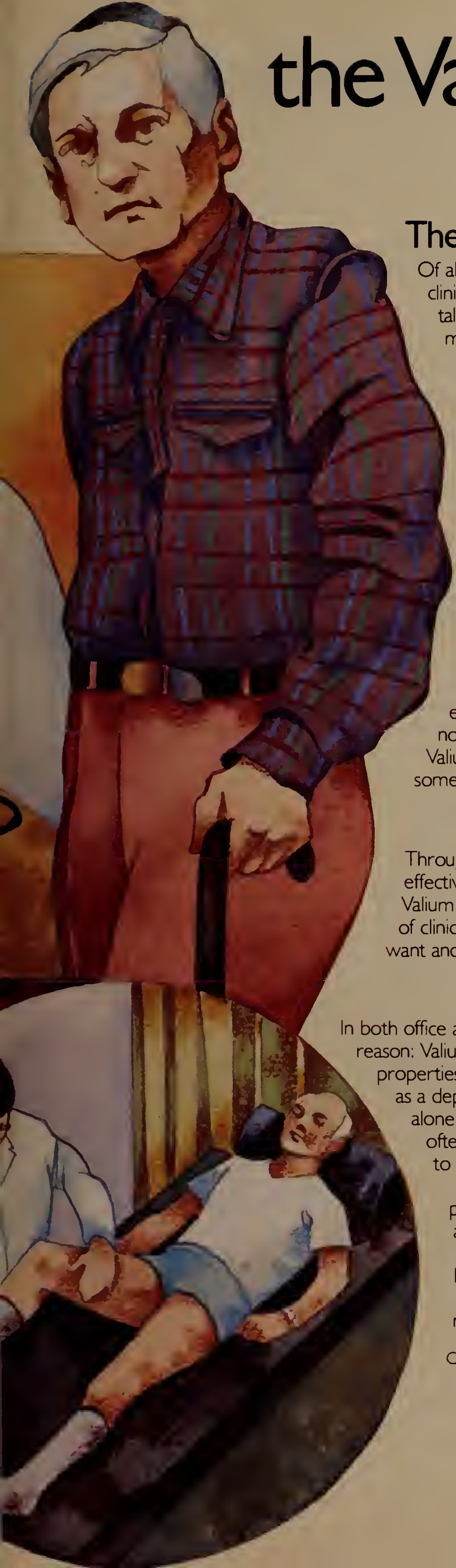

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Unmatched history of clinical effectiveness

Through the years, hundreds of reports have been published attesting to the clinical effectiveness of Valium (diazepam/Roche). A dependable and widely trusted psychotropic, Valium has fully established its ability to relieve symptoms of excessive anxiety in a variety of clinical situations—producing the distinctive antianxiety response that clinicians know, want and expect.

Unmatched range of indications

In both office and hospital practice, only Valium (diazepam/Roche) does so much so well. One reason: Valium can claim not only clinically useful "mind and muscle" effects but anticonvulsant properties as well. The most versatile of the benzodiazepines, Valium is most widely known as a dependable anxiolytic, producing prompt relief of excessive anxiety, whether seen alone or associated with functional or organic disorders. In addition, adjunctive Valium is often an important asset in programs designed to relieve skeletal muscle spasm due to local pathology or to control certain seizure disorders.

Valium fits well into most therapeutic regimens because it is used with many primary medications, such as cardiac glycosides, diuretics, antacids, vasodilators and anticoagulants. The clearance of Valium and certain other benzodiazepines can be delayed by cimetidine administration, but the clinical significance of this is unclear. Patients should be cautioned against drinking alcohol, driving or operating machinery while taking Valium, as with all agents that act on the CNS. Periodic reassessment of the usefulness of continued therapy with Valium is recommended.

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(diazepam/Roche)Ⓒ

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal, adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).
The effectiveness of Valium in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.
Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.
The clearance of Valium and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.
Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.
Dosage: Individualize for maximum beneficial effect. *Adults:* Anxiety disorders, symptoms of anxiety, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).
How Supplied: For oral administration, Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100* and 500.* Prescription Paks of 50, available in trays of 10.* Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25,† and in boxes containing 10 strips of 10.†

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Medical Meetings

Sports medicine symposium

The Committee on the Medical Aspects of Sports of the North Carolina Medical Society will hold its 13th Annual Sports Medicine Symposium July 1–3, 1983. The purpose of the symposium is to provide an educational program "On the field and court evaluation and treatment" and "recreational sports" for *physicians of all specialties* who have a direct or indirect interest in sports medicine. For further information contact: Mr. Alan Skipper, N.C. Medical Society, PO Box 27167, Raleigh, NC 27611. Telephone: (919) 833-3836.

American College of Surgeons
ACS Annual Meeting

Dr. Walter Lawrence, surgical oncologist from the Medical College of Virginia, will be the special guest speaker at the North Carolina Chapter of the ACS annual meeting in May, 1983 at Wrightsville Beach, NC. The central theme of this program will be "Insight: The Treatment of Cancer". For further information contact: Richard W. Furman, M.D., FACS, Secretary-Treasurer (704) 264-2340.

Postgraduate CME

During the month of May, 1983 the Division of Pediatric Pulmonary Diseases of Duke University will present its 12th Annual Postgraduate Course at the Searle Center for Continuing Education in the Health Sciences of Duke University Medical Center, Durham, North Carolina. The objective of the program is to enhance patient care by providing practicing physicians with the techniques related to the diagnosis and treatment of pediatric pulmonary infections. The course is intended as a workshop for primary care physicians, especially pediatricians, general physicians, allergists and pulmonary specialists. For more information contact: Dr. Alexander Spock, Course Director, Duke University Medical Center, PO Box 2994, Durham, N.C. 27710.

Requiem for PSRO (1972–1982)

The obituary was short, hidden under the headline, "Durenberger Legislation Passes." Professional Standards Review Organization (PSRO) is dead. It is known that PSRO lingered in intensive care and that the physician of record, an AMA delegate, finally penned "Do not resuscitate" on the order sheet. Calling hours were not crowded — a few physicians dropped by to pay their last respects, but the absence of hospital administrators, politicians, and third party insurors was notable. PSRO lived for a decade — remarkable when one considers that most government programs only last seven years! Before looking at PSRO's heir-apparent, PRO (Peer Review Organization), it would be important to review the post mortem findings on PSRO.

The medical profession did not take readily to PSRO when it was introduced in 1972. But the program made remarkable progress toward assuring patients high quality care within a cost-effective system. It facilitated such innovations as preadmission testing, shortened hospital stays, elimination of weekend admissions and excessive preoperative days. Physicians admitted patients less frequently to hospitals for frivolous reasons or for "checkups." As it turned out, appropriate early discharges freed beds and contributed to a lessening of hospital construction. Hospitals themselves instituted one-day surgery programs. Admissions decreased for ancillary testing, which could be done more appropriately on an outpatient basis. The program ferreted out inappropriate, delayed, and unnecessary procedures. Medical care evaluation studies were instituted which enabled area physicians to compare, for example, the use of blood products or indications for cesarean section in various hospitals and counties. "Discharge tomorrow" began disappearing from the charts, if patients were ready to go home the day the discharge order was written. Improprieties in patient care were identified, remedial measures were suggested, and failure to improve resulted in exclusion of some physicians from Medicare and Medicaid programs.

PSRO did experience growing pains. Individual PSROs were identified as being insufficiently cost-effective, while others failed to demonstrate that they were capable of having even minimal effect on patient care. A lack of enthusiasm on the part of physicians hurt the program, as did the AMA's opposition to government directed peer review. The most important factor in PSRO's demise, however, came through the Reagan administration's recommendation to phase out the flow of federal funds. In the end, Congress repealed the law.

What is to replace the PSRO program? Included in the Tax Equity and Fiscal Responsibility Act, which was passed by Congress in 1982, is a new concept of peer review. This is part of a bill introduced by Senators Durenberger, Heinz and Moynihan and has come to be known as the "Peer Review Improvement Act of 1982." The law has placed emphasis in three areas: physician behavior, the private sector, and minimization of government intrusions. Following are some of the provisions of the new legislation:

1. Prime contractors for the PRO designation would be physician-sponsored organizations (defined as representing at least 5% of the State's medical and osteopathic practitioners) or physician access organizations (groups with a substantial number of physicians who engage in practice and who are representative of the area's practitioners). If no such organization is available, other potential contractors might include insurance companies or foundations. However, insurance companies are prohibited from applying for a contract for the initial 12 months.

2. Consolidation of review efforts will occur. In states with fewer than 180,000 Medicare and Medicaid admissions per year the State must be designated as a single service area. In states with a greater number of admissions, the Secretary has the option of designating multiple service areas.

3. Provisions for evaluation of the PRO are in place. Before terminating a contract with such an organization, the Secretary of Health and Human Services must appoint a panel to review the organization, although he or she is not bound by their findings.

4. The Peer Review Organization will be exempt from the release of information under the Freedom of Information Act.

5. The payment mechanism of the PRO will be similar to that used with fiscal intermediaries and will be agreed upon at the time the contract is negotiated.

Thus, although the ball is back in the hands of the medical profession, it has a limited period of time in which to respond.

The Medical Society of the State of New York (MSSNY) passed two motions at the House of Delegates meeting in November 1982. The first of these is as follows: "That the Secretary of Health and Human Services be requested by the Medical Society of the State of New York to appoint MSSNY as the principal organization for medical peer review in New York State." A second motion recommended an approach outlined by the AMA's Council on Medical Services as the basis for a proposal to the Secretary of Health and Human Services for carrying out peer review. Known as "Approach I" it is a system involving a nonprofit corporation whose organizational structure mirrors that of the state medical society. This system has two components: a state-level component, which provides centralized computer resources, negotiates contracts, and provides administrative staffing and statewide administrative services; and a local component, which reviews the quality and utilization of health care provided within each county, takes corrective action when indicated, and appoints hospital utilization review committees.

It is essential that MSSNY have input with the Secretary regarding the service areas to be designated in New York State. The fourteen active PSRO areas will not survive and are not consistent with the current federal legislation. The single corporation (MSSNY) to which the PROs can relate as contractors appears attractive. MSSNY could speak for all PROs on private review matters. Negotiations with potential clients, would be easier to accomplish since many do business in a number of current PSRO areas. A statewide data base could be developed concerning private review information. Publication of studies and comparative analyses could be highly attractive to clients. The strong support for private review for MSSNY would provide a legitimacy which would be extremely important to the efforts of local PROs and to their ability to win widespread cooperation of physicians.

At its February 1983 meeting the Council of MSSNY authorized $50,000 as a funding base in the fulfilling of MSSNY's stated intent to become the designated PRO for New York State. Ironically, also in February, James Sammons, MD, Executive Vice-President of the American Medical Association, testified in Washington before the House Task Force on Entitlements Committee of the Budget that the AMA endorses the administration's request that no funds be appropriated for PSRO or PRO activities in the coming fiscal year. This statement appears to be contrary to the action of the AMA House of Delegates at its interim meeting in December in support of professional participation in the PRO Law program.

The issue is certain to engender considerable debate at the June 1983 meeting of the AMA House of Delegates.

JOHN PRYOR, MD
Chairman
Peer Review Committee
MSSNY

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Hypertension in Diabetes Mellitus

The treatment of hypertension and diabetes mellitus occurring in the same individual poses a special challenge to the clinician. Evaluation and management of hypertension may adversely affect the diabetic patient. On the other hand, only rarely does the management of diabetes mellitus affect the course of hypertension (eg, induction of hypertension and its attendant risks by fludrocortisone acetate administration in diabetic patients with orthostatic hypotension.[1]

In the patient with disordered carbohydrate metabolism and hypertension, the characteristic history and physical findings of endocrine causes of associated impairment of glucose tolerance and hypertension should be sought. These include (1) the weakness, skin changes, and changes in body fat distribution characteristic of hyperadrenocorticism (Cushing's syndrome); (2) weakness, polyuria, and occasional neuromuscular irritability of primary hyperaldosteronism; and (3) headache, palpitation, inappropriate diaphoresis, and orthostatic hypotension encountered in pheochromocytoma.

Baseline laboratory tests conventially recommended[2] in the cost-effective evaluation of the hypertensive patient include a serum potassium level but no other determinations relevant to the evaluation of the patient with both hypertension and carbohydrate intolerance. Unfortunately, the patient with primary hyperaldosteronism who is limiting sodium intake may not show hypokalemia, and only 20% of subjects with endogenous Cushing's syndrome demonstrate hypokalemia. Presence of symptoms or signs listed above, or failure of routine hypertension treatment to achieve normal bood pressure levels, should prompt an investigation for endocrine-related hypertension.

In the course of evaluating hypertension in patients with diabetes, delineation of renal anatomy may be indicated. Diabetic patients whose serum creatinine concentration is greater than 1.5 mg/dL are at risk of developing acute renal failure after radiographic contrast procedures,[3,4] and the potential for gaining information radiologically should be weighed against the potential for dye-induced renal injury in these patients. Not only intravenous urography, but also contrast dye-associated computerized axial tomography or angiography of any organ may pose a risk to the diabetic patient with even mildly impaired renal function.

The stepped-care approach to treatment of hypertension outlined by the Joint National Committee on the Detection, Evaluation and Treatment of High Blood Pressure[2] may be used in the management of the hypertensive diabetic patient, with modifications to minimize adverse effects. These modifications depend on the classification[5] and hypoglycemic treatment of the diabetic patient (Table). Patients with type I diabetes rely entirely on exogenous insulin for blood glucose regulation. They are ketosis-prone and include patients formerly classified as having "juvenile-onset" diabetes. Patients with type II non-insulin-dependent diabetes, formerly considered to have "adult-onset" diabetes, produce some endogenous insulin and may be treated with diet alone, oral hypoglycemic agents, or insulin. Individuals with impaired glucose tolerance (IGT) have plasma glucose levels intermediate between those considered normal and those considered diabetic.[5]

A thiazide diuretic is conventional first-step treatment for hypertension. Thiazides or furosemide do not affect diabetic control in the type I diabetic patient, but deterioration in blood glucose control should be anticipated in the type II diabetic patient and in patients with IGT.[6–8] Fortunately, only a minority of type II diabetic patients with hypertension develop worsened hyperglycemia during thiazide treatment; however, no factors have been identified which allow us to predict which patients with hypertension will show changes in blood glucose level or when such changes will occur after introducing thiazide therapy. Weeks, months, or years of thiazide administration may precede worsened carbohydrate intolerance apparently due to thiazide diuretic use. Withdrawal of thiazide may result promptly or surprisingly slowly in improved glucose tolerance. This diabetogenic effect of thiazide or furosemide may be avoided or attenuated in many patients by institution of ethacrynic acid therapy.[7,9] We have routinely used ethacrynic acid in patients who have had thiazide diuretic- or furosemide-related hyperglycemic nonketotic coma[10–12] and who require diuretic therapy, and we have observed no instances of worsened control of blood glucose level

Management of Hypertension in Diabetic Patients

	Types of Diabetes			
	Type I	Type II		
Step-Care Agent		Diet-Controlled	Sulfonylurea-Controlled	Exogenous Insulin-Controlled
Step 1				
Diuretic				
Thiazide		Possible deterioration in glycemic control	Increased risk of hyponatremia when chlorpropamide is administered	Possible deterioration in control if daily dose is <15 U intermediate-acting insulin
Furosemide		Possible deterioration in glycemic control		
Ethacrynic acid		No alteration in glycemic control		
Step 2				
Adrenergic inhibitor				
Nonselective β-blocker	Absence of tachycardia with hypoglycemia			
Selective β_1-blocker	Possibly advantageous in patients subject to hypoglycemia			
Clonidine				
Methyldopa	Orthostatic hypotension in patients with autonomic neuropathy may be exaggerated			
Prazocin				
Reserpine				
Step 3				
Vasodilator				
Step 4				
Guanethidine	Absence of tachycardia with hypoglycemia; orthostatic hypotension in patients with autonomic neuropathy may be exaggerated			

due to ethacrynic acid. Gastrointestinal intolerance of ethacrynic acid has occasionally been troublesome, however.

When promptly recognized, thiazide-related hypoglycemia can be satisfactorily treated with more aggressive insulin or sulfonylurea administration. In the patient who is hypertensive and diabetic, and is receiving thiazide treatment, it is worth considering whether the "diabetes" is endogenous or entirely attributable to diuretic therapy. In the type II diabetic patient taking the oral sulfonylurea, chlorpropamide, institution of *any* diuretic may potentiate the hyponatremic risk of chlorpropamide.[13,14] Another disadvantage of thiazide diuretic use is the increase in serum low-density lipoprotein cholesterol.[15]

Step 2 medications include beta-blocking agents and other sympatholytic agents. Although the frequency of hypoglycemia is not increased in patients with diabetes who are taking beta-blocking agents,[16] the tachycardic (adrenergic) response to insulin-induced hypoglycemia may be masked, the hyoglycemia may be prolonged, and hypertension may occur during the hypoglycemic episode.[17] These agents may be safely used in the patient with type II diabetes who is controlled on diet or oral agents, and may be considered in the stable insulin-requiring patient who has not had hypoglycemic episodes. In the patient who has had hypoglycemic episodes, these drugs are not contraindicated, but the patient should be aware that some of the warning signs of hypoglycemia, such as tachycardia, may not occur. The sweating response to hypoglycemia is retained; increased diaphoresis in some patients may serve as an adequate warning of the presence of hypoglycemia. The impact of beta-blockade on "counterregulation," the beta-mediated process of hormone-dependent hyperglycemia in response to hypoglycemia, is not yet known.[18] The use of cardioselective beta-blocking agents has a theoretical advantage in that the metabolic beta-receptors may remain functional and counterregulation can proceed normally. Since vasodilating beta-receptors are not affected by beta$_1$-blocking agents,[19] diastolic hypertensive episodes following hypoglycemia are thought less likely to occur. Nevertheless, such hypertension has already been described with the use of a selective beta$_1$-blocking agent, metoprolol.[20]

Other sympatholytic agents may also abolish the reflex tachycardia induced by hypoglycemia. Orthostatic hypotension is frequently observed with certain of these agents, especially reserpine and guanethidine (step 4), and may obscure the diagnosis of, or exacerbate the symptoms frequently associated with, autonomic neuropathy.

Step 3 vasodilating agents do not affect the course of diabetes mellitus and may be used in diabetic patients if not contraindicated for other reasons.

Administration of low doses of an angiotensin-converting enzyme (ACE) inhibitor, captopril, cannot yet be broadly endorsed as an alternative strategy in managing mild hypertension in diabetic patients. The elevation of endogenous ACE activity in diabetic patients,[21] usually in those with retinopathy, is unexplained and the consequences, if any, of captopril in such patients are unknown. The development of proteinuria in a small minority of captopril-treated patients[22] can only serve to confuse the issue in patients with diabetes of the presence or absence of diabetic glomerulopathy. In any case, the development of renal insufficiency in captopril-treated patients with renal artery atherosclerosis[23,24] would be a risk in the diabetic population with its increased incidence of large vessel occlusive disease.

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Supported in part by a grant from the New York State Department of Health (CDC 172502).

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News Briefs

Appointments and Awards

Joseph J. Kaufman, M.D., a surgeon and general practitioner from Newark (Wayne County), New York, has been named the new President-Elect of the Forum for Medical Affairs. Dr. Kaufman is presently chairman of the MSSNY Judicial Council. He was elected to the Forum presidency at the Interim Meeting last December and will preside during the Interim Meeting in Honolulu in December 1983.

Joseph E. Onah M.D., of Brooklyn, New York and a specialist in cardiovascular diseases has been elected to Fellowship in the American College of Physicians. He will be honored during the Convocation ceremony at the College's Annual Session in San Francisco, on April 11–14, 1983.

Research scholar

Among the five young physicians named to receive one of the three-year ACP (American College of Physicians) Teaching and Research Scholarships is Philip Greenland, M.D., of the University of Rochester School of Medicine, for his research in clinical epidemiology. The scholars each receive stipends of $15,000, $16,000 and $17,000 for their first, second, and third years of research.

Grants awarded to RPMI

The Roswell Park Memorial Institute, New York State Health Department's comprehensive cancer center in Buffalo is the recipient of several federal grants totaling approximately $449,546. The Molecular Immunology Department has received two grants from the National Cancer Institute (NCI). They went to Dr. Richard B. Bankert, for research to study receptor dynamics and normal tumor cell function and to Dr. Nobuyuki Tanigaki, to study membrane antigens from normal and leukemic lymphocytes. A third NCI grant went to Dr. Ming C. Wang, of the Diagnostic Immunology Research and Biochemistry Department, to investigate immuno-specific chemotherapies of prostate cancer. The National Science Foundation gave a grant to Dr. Khushi L. Matta, of the Gynecologic Oncology Department, to study the synthesis of oligosaccharides containing terminal sialic acid residue.

Dr. David Kowalski, of the Cell and Tumor Biology Department, received a grant from the National Institute of General Medical Sciences to investigate enzymatic probes for open regions in supercoiled DNA. Best Foods has given a grant to Dr. Clement Ip, of the Breast Surgery Department, to study fatty acid and fat dose responses in the mammary carcinogen animal model. Dr. Robert Rein, of the Experimental Pathology Department, received a grant from the National Aeronautics and Space Administration to investigate the structured and dynamic aspects of the origin in the genetic system.

New awards program

The American Paraplegia Society is instituting an awards program to promote the exchange of knowledge of spinal cord injury as well as allied health care. *The American Paraplegia Society Award for Spinal Cord Injury* consists of a nomentary grant for an original work in basic and clinical spinal cord injury research. Deadline for application is July 1, 1983. For further details contact the American Paraplegia Society, 432 Park Avenue South, New York, New York 10016.

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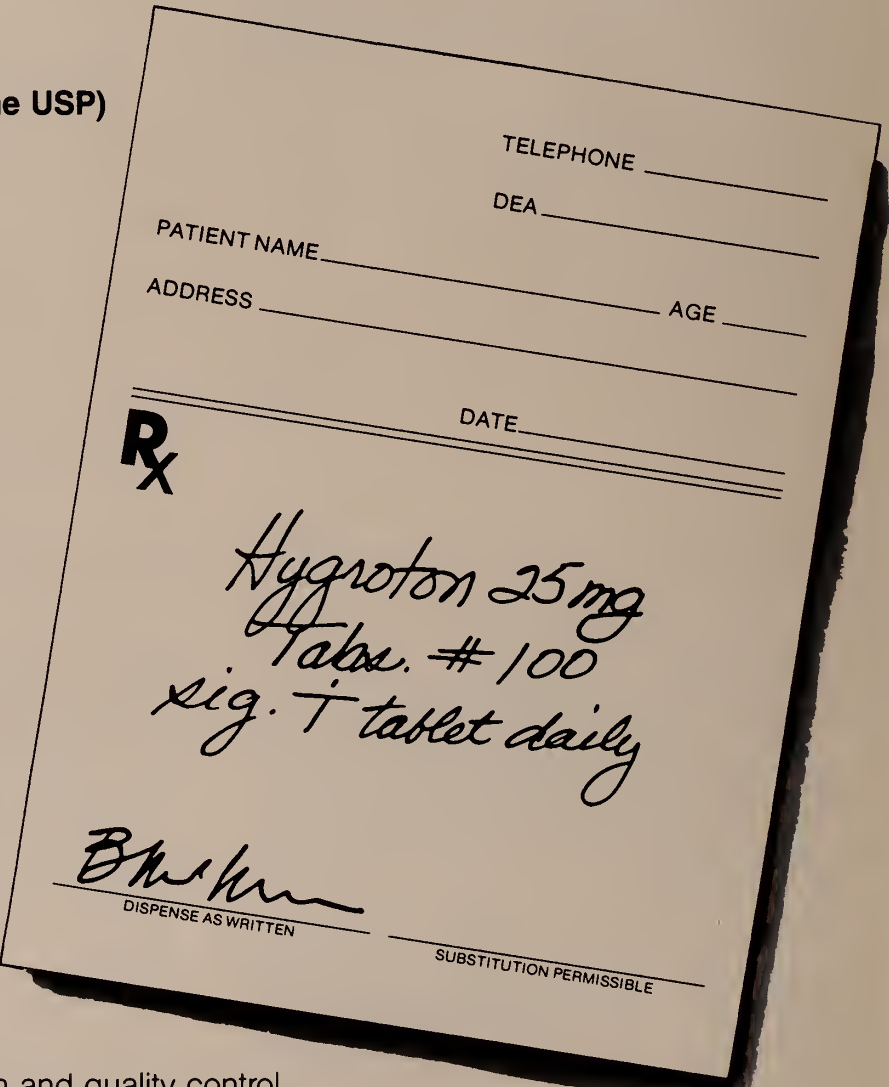
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BRIEF SUMMARY

Indications: Hypertension, adjunctive therapy in edema.

Contraindications: Anuria, hypersensitivity to chlorthalidone or other sulfonamide-derived drugs.

Warnings: Should be used with caution in severe renal disease, impaired hepatic function or progressive liver disease. May add to or potentiate the action of other antihypertensive drugs. Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma. There is a possibility of exacerbation or activation of systemic lupus erythematosus with thiazides, which are related to chlorthalidone. This has not been reported with chlorthalidone. Thiazides cross the placental barrier and appear in cord blood Use in pregnant women requires that the anticipated benefits of the drug be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. In nursing mothers, thiazides cross the placental barrier and appear in breast milk. If use of the drug is essential, the patient should stop nursing.

Precautions: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals. All patients receiving chlorthalidone should be observed for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Hypokalemia may develop with chlorthalidone as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH. Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity. Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather. Hyperuricemia may occur or gout be precipitated in certain patients. Insulin requirements in diabetic patients may be increased, decreased, or unchanged and latent diabetes mellitus may become manifest. Chlorthalidone and related drugs may increase the responsiveness to tubocurarine. The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient. Chlorthalidone and related drugs may decrease arterial responsiveness to norepinephrine. If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy. Chlorthalidone and related drugs may decrease serum PBI levels without signs of thyroid disturbance.

Adverse Reactions: Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis; dizziness, vertigo, paresthesias, headache, xanthopsia; leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia; purpura, photosensitivity, rash, urticaria, necrotizing angiitis (vasculitis) (cutaneous vasculitis), Lyell's syndrome (toxic epidermal necrolysis). Orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates or narcotics. Other adverse reactions include hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness, impotence. Whenever adverse reactions are moderate or severe, chlorthalidone dosage should be reduced or therapy withdrawn.

Usual Dose: One tablet daily.

How Supplied: Tablets—100 mg. (white, scored), 50 mg. (aqua) in bottles of 100, 1000 and 5000; 25 mg. (peach) in bottles of 100 and 1000; unit-dose blister packs, boxes of 100 (10 x 10 strips).

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125-F

Coincident Hypertension

*Deleterious effects on patients with hyperglycemia**

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To determine whether or not the occurrence of hypertension in patients with hyperglycemia increases the hazard of cardiovascular (CV) morbidity (stroke and myocardial infarction), the experience of patients having hyperglycemia with and without concomitant hypertension was examined. Charts of 1,369 patients making an initial visit to a general medical clinic in 1975 were reviewed. Of 129 hyperglycemic patients, 77 (59.7%) had high blood pressure. Although hyperglycemic patients with and without hypertension had similar demographic characteristics and similar proportions of clinical abnormalities, only patients with hypertension sustained stroke or myocardial infarction. When patients were stratified by number of initial risk factors, it was only hypertensive patients with one or more risk factors who experienced CV morbidity. These findings suggest that coincident hypertension in patients with impairment of glucose tolerance may significantly affect prognosis. Thus, accurate assessment of CV risk among patients with glucose intolerance can be made more reliably with an awareness of coincident disease status.

Both hypertension and hyperglycemia are believed to increase the hazard of cardiovascular (CV) disease.[1–7] There have been some recent studies examining the impact of these two conditions in combination.[8,9] The relevance of the findings from these studies to preventive medicine points out the need for further research. Furthermore, it has been suggested that among persons with high blood pressure, the presence of diabetes increases the risk of CV disease.[10] In an effort to assess the impact of hypertension in the hyperglycemic patient, we have compared the course of hyperglycemic patients with and without concomitant hypertension.

For editorial comment see page 688

Methods

Charts of all patients making their initial visit to the general medical clinic of a university hospital in 1975 were reviewed to select those having hyperglycemia. This was defined by the presence of a fasting blood glucose level of ≥110 mg/dL, or a two-hour oral glucose tolerance test (OGTT) level ≥140 mg/dL, or a casual blood glucose level ≥140 mg/dL, or treatment by either oral hypoglycemic agents or insulin. Application of these criteria for identifying patients with impaired glucose tolerance, while practical in a retrospective study, decreased the specificity but increased the sensitivity of the diagnosis, thus allowing evaluation and follow-up of the maximum number of patients with even minimal abnormality of glucose metabolism.

This group was then divided into patients with normal blood pressure levels and those with hypertension. Hypertensive patients were those whose systolic blood pressure was ≥160 mm Hg or whose diastolic blood pressure was ≥95 mm Hg or who were taking antihypertensive medication at the time of their initial visit.

Selected clinical abnormalities at initial assessment indicative of key target organ damage and subsequent CV morbidity and hospitalizations were obtained from chart review for these two groups of patients. An elevated BUN/creatinine level was defined as a BUN level >30 mg/dL and/or a creatinine level >2 mg/dL. EKG results scored as major abnormalities were myocardial infarction (MI), definite ischemia, left ventricular hypertrophy (LVH), and left bundle branch block (LBBB). The results of a funduscopic examination were considered to be abnormal if hemorrhages or exudates were present, or if a diagnosis of diabetic retinopathy was made, corresponding to groups 3 and 4 of the Keith-Wagener-Barker[11] classification criteria. The presence of ≥2+ urine sugar and/or urine protein was considered to be abnormal. Data on smoking history and cholesterol were not included since they were not available for most patients. Subsequent CV morbidity included stroke and MI, recorded as such in the patient's medical chart.

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* This research was supported in part by grant HL 07379 from the National Institutes of Health.
Presented in part at the Ninth Scientific Meeting of the International Epidemiological Association in Edinburgh, Scotland, August 22–29, 1981.

Demographic and clinical characteristics of hypertensive and normotensive groups were compared and the statistical significance of associations were tested using the chi-square statistic. Means of continuous variables were compared using the standard Student's *t* test.

For both study groups, data were collected for a maximum follow-up period of four years. Since complete follow-up was not available for all patients, the number of months of follow-up after initial physician's examination was calculated for each individual up to four years, and then converted to person-years of observation.[12] Morbidity and hospitalization rates were computed and expressed per 100 person-years of observation.

We should mention the limitations inherent in a study using medical records of hospital patients. Sample selection, one of the major drawbacks, may limit the extension of the findings to the general population. In fact, the effect of sample selection has recently been shown in a comparative study of the combination of hypertension and diabetes in a hospital clinic and a work-site population.[13] In addition, the stage of disease at which these patients came to the hospital clinic is not known. Furthermore, information regarding the precedence in the onset of either hypertension or hyperglycemia is not available. It is important to keep in mind these limitations while interpreting the findings of the present study.

Results

Of 1,369 patients who made their first visit to the general medical clinic in 1975, 129 had hyperglycemia, resulting in a prevalence of 9.4%. Of 129 hyperglycemic patients, 77 (59.7%) also had elevated blood pressure.

Initial demographic and clinical characteristics. Table I compares the demographic characteristics and clinical abnormalities of patients in the two diabetic groups with and without hypertension. Mean ages of males and females and the proportions of patients less than 65 and those greater than or equal to 65 years of age were not different in the two groups (*P* >.05). Patients in both groups were predominantly female and the proportions of males to females were identical.

Initial clinical assessment revealed similar proportions of abnormalities in the two groups. Only funduscopic abnormalities were more than twice as frequent among hypertensive patients, but this difference did not reach statistical significance (*P* >.05).

The number of risk factors of patients in both groups is presented in Table II. The distribution of patients according to their number of risk factors reveals consistently higher percentages among the hypertensive ones at every level of risk. The proportions of hypertensive and normotensive subjects with one or more risk factors are 48% and 33%, and with two or more risk factors, are 12% and 8%, respectively. Neither of these differences in proportions reached statistical significance (*P* >.05).

The frequency distribution of the two hyperglycemic groups by levels of blood glucose and their mean blood pressures are presented in Table III. The proportions of patients in the two groups by blood glucose levels at the initial examination were not different (*P* >.05). Similar findings were observed for patients in the two groups using insulin or oral hypoglycemic agents.

As expected, the differences in the mean blood pressures of the two groups were statistically very highly significant (*P* <.001). Of the hypertensive patients, 56.6% were taking antihypertensive medication at the initial examination. Mean blood pressures were similar for treated (165.7/95.4) and untreated (165.5/94.3) hypertensive patients.

Comparison of outcome data. Table IV compares the incidence of CV morbidity expressed as events per 100 person-years of follow-up among hyperglycemic patients with and without hypertension. The mean length of follow-up was identical for the two groups. While major CV morbidity was absent among the normotensive patients, hypertensive pa-

TABLE I. Initial Demographic Characteristics and Clinical Abnormalities of Hyperglycemic Patients With and Without Hypertension

	Hyperglycemic	
Characteristic	Hypertensive (n = 77)	Normotensive (n = 52)
Demographic characteristics		
Mean age ± SD, (yr)		
Total	59.9 ± 11.6	57.5 ± 16.3
Male	60.2 ± 11.3	58.0 ± 15.1
Female	59.6 ± 11.9	57.0 ± 17.4
Sex (% male)	44.2%	44.2%
Clinical abnormalities		
BUN/Creatinine*	7.6%	6.3%
EKG†	30.8%	25.0%
Funduscopic**	22.8%	8.9%
Urine sugar‡	24.2%	19.0%
Urine protein‡	9.1%	9.8%

* BUN >30 mg/dL and/or creatinine >2 mg/dL, %.
† MI, ischemia, LVH, LBBB.
** Hemorrhages and exudates.
‡ 2+ or more.

TABLE II. Initial Risk Factor* Status of Hyperglycemic Patients With and Without Hypertension

	Hyperglycemic			
	Hypertensive (n = 77)		Normotensive (n = 52)	
No. Risk Factors	No.	%	No.	%
0	40	51.9	35	67.3
1	28	36.4	13	25.0
2	7	9.1	3	5.8
3	2	2.6	1	1.9

* Risk factors include abnormal values of BUN/creatinine and urine protein; and EKG and funduscopic abnormalities.

TABLE III. Initial Blood Glucose Level and Mean Blood Pressure in Hyperglycemic Patients With and Without Hypertension

	Hyperglycemic			
	Hypertensive		Normotensive	
Characteristic	No.	%	No.	%
Blood glucose level				
High*	37	48.7	26	50.0
Borderline†	30	39.5	24	46.2
Low**	9	11.8	2	3.8
Total	76	100.0	52	100.0
Blood pressure, mm Hg	Mean	SD	Mean	SD
Systolic	165.6	23.4	132.9	13.1
Diastolic	94.9	12.5	79.8	9.4
	(n = 76)		(n = 52)	

* High glucose level refers to fasting blood glucose ≥140 mg/dL, or OGTT level ≥200 mg/dL (2 hr), or casual blood glucose ≥170 mg/dL.

† Borderline glucose level refers to fasting blood glucose 110–139 mg/dL, or OGTT level 140–199 mg/dL (2 hr), or casual blood glucose 140–169 mg/dL.

** Low glucose level refers to fasting blood glucose <110 mg/dL, or OGTT level <140 mg/dL (2 hr), or casual blood glucose <140 mg/dL.

TABLE IV. Cardiovascular Morbidity and Hospitalization Rates in Hyperglycemic Patients With and Without Hypertension*

	Hyperglycemic			
	Hypertensive		Normotensive	
Outcome	No. of Events	Rate	No. of Events	Rate
CV Morbidity	6	5.3	0	0.0
Stroke	5	4.4	0	0.0
MI	1	0.9	0	0.0
Hospitalization	51	45.1	17	22.5
CV-related	10	8.8	2	2.7
Mean length of follow-up, yr†	1.5		1.5	

* Events per 100 person-years.

† Potential follow-up period of 4 years.

tients sustained six strokes and MIs. In contrast to the usual distribution of CV events, stroke accounted for the major portion of CV morbidity. The hospitalization rates for all causes and for CV-related causes were two and three times as high among hypertensive as normotensive patients, respectively. Because these rates were based on a small number of events, it was not possible to apply statistical tests.

Out of five hypertensive patients in whom CV events occurred, four were aged 65 years and over despite the similar proportions of old (≥65 years) to young (<65 years) in the two hyperglycemic groups. All events occurred among hypertensive patients who had one or more risk factors present at the initial examination. However, BUN >30 mg/dL and/or creatinine >2 mg/dL was absent among those who had events. Four out of five patients having an event were taking antihypertensive medication, but those four patients had blood pressure levels similar to other hypertensive patients receiving therapy. Three out of five patients had diastolic blood pressure ≥95 mm Hg, mean = 95.2 mm Hg, while four out of five patients had systolic blood pressure ≥160 mm Hg, mean = 169.2 mm Hg, at the initial examination. All five patients had a fasting blood glucose level ≥140 mg/dL at the initial examination, with a mean of 209.6 mg/dL, whereas only 37% of all hypertensive patients recorded such a high blood glucose level. None of the 26 normotensive patients with a similarly elevated blood glucose experienced a CV event.

Comment

Hyperglycemic patients with and without hypertension had similar demographic characteristics and proportions of clinical abnormalities at the initial physician's examination. Only the presence of hypertension, and consequently, mean blood pressure levels, were significantly different between the two hyperglycemic groups. In a follow-up period of up to four years, the incidence of CV morbidity proved to be much greater among the hypertensive patients. In striking contrast to patients with high blood pressure, those with impaired glucose tolerance but normal blood pressure experienced neither stroke nor MI. However, these patients experienced congestive heart failure, which has been shown in Table IV as CV-related hospitalizations. Both overall hospitalizations and hospitalizations resulting from CV complications occurred more frequently among the hypertensive patients.

One explanation for these findings could have been that hypertensive subjects were at greater overall risk than normotensive diabetics. Although hypertensive patients had consistently higher percentages at each level of risk, there were no significant differences between the hypertensive and normotensive groups at the level of one or more risk factors. However, at this level of risk, CV events occurred only among the hypertensive and not among the normotensive patients. Clearly, the presence of the selected deleterious clinical and demographic characteristics does not seem to explain totally the observed differences in CV morbidity.

A more compatible explanation for the findings may be that the disease of those diabetics with hypertension who had events had progressed further than that of other hypertensive diabetics with no events and diabetics with normal levels of blood pressure. This could be due to either a longer existence of the two conditions or, alternately, that in combination hypertension and diabetes accelerate vascular deterioration. Findings in support of this view include:

1. Hypertensive hyperglycemic patients having events were found to be 9.5 years older than hypertensive hyperglycemics who were event-free (mean age = 68.8 vs. 59.3 years).
2. Four out of five hypertensive patients having events were taking antihypertensive medication as compared to 55.5% of the event-free hypertensive patients. This contrast may reflect that the hypertension of the event group existed for a longer period of time. In addition, since patients who had and had not been treated for hypertension had similar levels of blood pressure at the initial examination, it is likely that treated hypertensive patients' blood pressure levels were even higher before initiation of therapy than were the blood pressure levels of untreated hypertensive patients.
3. All hypertensives having events had very high fasting blood sugar levels (mean = 210 mg/100 dL) perhaps indicating the more advanced stage of the disease. This could have been the effect of diuretics, since these patients may have been receiving such therapy for long periods. Deterioration in glucose tolerance has been associated with the use of diuretics.[14,15]

The available data do not permit a precise determination of the pathophysiologic relationship of the glucose and blood pressure abnormalities. Diabetes itself may induce renal changes that in turn can be responsible for high blood pressure. The present study does not provide the kind of prospective longitudinal information to determine without question whether this is the case. However, the rarity of renal insufficiency in the whole group and its absence among those who sustained a CV event argues persuasively against diabetic nephropathy being a major factor in either the hypertension or its consequences.

These findings do, however, provide evidence that coincident conditions in patients with impairment of glucose tolerance may significantly affect prognosis. In particular, hypertension appears to be a factor of substantial prognostic significance of CV disease occurrence in patients with impaired glucose tolerance. Moreover, there is reason to speculate that the duration of the hypertensive state and/or its severity may be important determinants of strokes and MIs. These results suggest that assessment of morbidity among patients with hyperglycemia can be made more reliably with an awareness of coincident blood pressure status.

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Carotid Endarterectomy Without Temporary Shunt

Importance of pharmacologic control of blood pressure

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In carotid endarterectomy, hypertension or sustained hypotension is an important factor in intraoperative and postoperative neurologic deficits. This is especially important in patients with known hypertension and severe degrees of stenosis of the internal carotid artery. The perfusion pressure distal to the stenosis is variable, unpredictable, and if noncompliant may result in hemorrhage if exposed to suddenly increased pressure head. Control of blood pressure, in our experience, has been the single most important factor in smooth intra- and postoperative courses.

Flushing Hospital and Medical Center is a community teaching hospital with an active neuroradiologic diagnostic service. Patients with symptomatic carotid disease requiring surgery have "four vessel" angiography performed using a biplane technique.

For the past three years, following a neurologic deficit in the recovery room due to unrecognized hypertension, we have routinely monitored blood pressure intraoperatively with an arterial line, which is left in place for at least 24 hours. Patients with known coronary artery disease also have a Swan-Ganz catheter inserted on the evening prior to surgery and volume loaded to bring their pulmonary capillary wedge (PCW) pressure to between 10–15 mm Hg (nine cases). Skin preparation is done only in the operating room with gentle handling of the neck to avoid dislodging of emboli.

Our technique focusing radial artery cannulation is as follows. After a careful Allen test, the radial artery is cannulated percutaneously with a size 22- × 1-in Teflon cannula.* Should there be any difficulty in percutaneous cannulation, the artery is surgically exposed through a vertical 1-cm incision, and the cannula is inserted through a 6-0 polypropylene suture in the anterior wall of the artery. We never ligate the artery and have had no complications with the circulation of the hand.

TABLE I. Age and Sex Distribution (50 cases)

Age Group	Sex Male	 Female
41–50	0	2
51–60	9	6
61–70	14	9
71–80	5	3
81–90	1	1

Swan-Ganz catheters have been used in slightly less than 20% of cases; they are used only in cases of documented coronary artery disease. Outside of the temporary ventricular arrhythmias, we have had no problems with its use; the catheter is usually removed in 24 hours.

General anesthesia, usually with halothane or a narcotic analgesic with muscle relaxant, is used. The latter is promptly reversed during skin closure so that the patient is usually awake at the completion of the procedure. No intraluminal shunt is used. The average carotid occlusion time in this series is 13 minutes.

Pharmacologic control of systemic systolic pressure is rigidly maintained intraoperatively and for 24 hours in the postoperative period between 130–200 torr by infusion of either dopamine hydrochloride (Intropin) in dilution of 1 mg/cc or nitroprusside 0–1 mg/cc, carefully titrated and infused using a constant rate infusion device (IVAC).

Fifty consecutive carotid endarterectomies have been performed in the past 2½ years using this technique of management. Patients' ages ranged from 46 through 82 years (see Table). No patient was operated on for asymptomatic bruit; all had either hemispheric or nonhemispheric symptoms.

Results

There was one intraoperative stroke in a patient with a previous history of hypertension and fixed neurologic deficit. Just after induction of anesthesia, the systolic pressure reached 250 torr before it could be controlled by nitroprusside. The patient suffered a neurologic deficit, bilateral hemispheric, which reversed partially. There was one death due to myocardial infarction in a patient with known coronary artery disease and a permanent pacemaker; this represents the single mortality in this series. One patient required evacuation of wound hematoma. Hypoglossal and cervical branch of facial nerve trauma were noted on one case each, both of which were reversible.

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* Becton Dickinson Company, Rutherford, New Jersey.

Comment

Carotid intimectomy is a safe procedure which can be done with or without an intraluminal shunt. Both techniques have their advocates.[1,2] However, hypertension and hypotension remain the most common intraoperative and postoperative problem.[3] Careful pharmacologic control of blood pressure during and after surgery, in our experience, remains a most important factor in presenting intraoperative and postoperative stroke. Important aspects of surgical techniques are (1) minimal manipulation of the arteries, (2) avoiding dissection around the carotid body and posterior aspects of the bifurcation where most plaques are located, (3) clamping of internal carotid artery prior to any dissection of posterior aspects of carotid bifurcation, should that be necessary, and (4) endarterectomy without patch graft.

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Prostatic Carcinoma

Treated at a categorical center, 1970–1979 *

This report covers a decade of experience with prostate cancer from a series of 881 cases seen at Roswell Park Memorial Institute (RPMI) from 1970 to 1979; and is a continuation of previous reports from a series of 466 cases seen from 1950 to 1959, and 500 cases seen from 1960 to 1969. In this series, 69 diagnoses of prostate cancer were made at autopsy (62 were stage A_1), and 128 were diagnosed at RPMI. The majority (78%) were diagnosed elsewhere and were referred to RPMI for treatment. The patients diagnosed at RPMI were significantly older (67) than the referrals, who averaged 64 years.

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Cancer of the prostate gland is the second most common cancer among American males and is the third leading cause of cancer deaths, with a death rate per 100,000 that has gradually risen from 14 in 1930 to 23 in 1978.[1] The American Cancer Society estimates that in 1982 there will be 73,000 new diagnoses of prostate cancer with 23,300 deaths.[2] Roswell Park Memorial Institute (RPMI), as a comprehensive center, has been reviewing the results of prostate cancer treatment and trends since 1950.[3–5] These data have resulted from pathologic grading and autopsies, careful follow-up, and coordination of clinical findings and laboratory determinations. These detailed data, now spanning three decades, provide valuable information on patterns of care, changing methods of diagnosis, and fundamental biologic distribution of the disease related to its clinical course from diagnosis through various modalities of treatment and, eventually, death.

This report presents these data on prostate cancer collected from 1970 through 1979 and consequently will include data from a report of the 1970–1974 period.[5] The trends and relationships from the past decade will be contrasted with those from the previous two decades to give a picture of patterns of care for the past third of a century.[3,4]

In addition, the data in this report will be contrasted with those collected over a comparable period through surveys on prostate cancer conducted through auspices of the American College of Surgeons Commission on Cancer.[6,7]

Materials and Methods

There were 881 patients with histologically confirmed prostate cancer seen or detected at autopsy at RPMI from January 1, 1970, through December 31, 1979. This report presents a description of these patients with regard to age and the clinical and pathologic characteristics of their disease, including stage, grade, symptoms, methods of diagnosis, sites of metastases, treatments, mortality status, and time from diagnosis to death. Not all variables were available or in some cases appropriate for all patients, consequently the subtotals varied; but where appropriate, an unknown category was included. The staging system used was the eight-stage (A_1, A_2; B_1, B_2, etc) system of Jewett,[8] extended from the four-stage system of Whitmore.[4] This staging system, as well as the four-grade system that corresponds to well, moderate, and poorly differentiated, and anaplastic histologic cell type have been described by Murphy.[9] These grades correspond relatively closely to the system used by Gaeta,[10] referred to as grades I–IV or 1–4 in the previous papers in this series.[3–5]

Results

There were 881 cases of prostate cancer seen at RPMI from 1970 through 1979, of which 197 (22%) were diagnosed at RPMI, although 69 of these (65%) were diagnosed at autopsy. The numbers of patients, stage, and origin of diagnosis are presented in Table I. Most of the A_1 disease (65%) was not detected until autopsy, and of the 33 detected clinically, 67% were referred. For all other stages, 75% to 90% were referred. Table II presents patients by origin of diagnosis and year first seen at RPMI. The number of prostate cancer cases seen each year has fluctuated considerably, but the overall trend shows an increasing patient load. The proportion of referrals to in-house diagnosis has steadily increased over the decade, from 35% referrals in 1970 to 91% in 1979.

The mean age at initial diagnosis of prostate cancer was 64.7 years. The referrals were significantly (P <.01) younger than those diagnosed at RPMI (Fig 1), with means of 64 and 67 years, respectively.

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* Supported in part by Grant CA-14716 of the U.S. Public Health Service of the National Institutes of Health.

TABLE I. Distributions of Patients by Stage of Disease and Origin of Initial Diagnosis in Patients Seen at RPMI* 1970–1979

Stage	Diagnosed at RPMI: At Autopsy	Diagnosed at RPMI: In Clinic	Diagnosed at RPMI: Total	Referrals	Total
A_1	62	11	73	22	95
A_2	...	2	2	6	8
B_1	1	7	8	35	43
B_2	...	3	3	14	17
C_1	2	19	21	94	115
C_2	...	3	3	27	30
D_1	1	14	15	27	42
D_2	3	41	44	235	279
Unknown	...	28	28	224	252
Total	69	128	197	684	881

* RPMI = Roswell Park Memorial Institute

The principal symptoms for each patient according to stage at diagnosis are presented in Table III. There was a high proportion with no symptoms for A_1s, because all but eight of the 70 (see Table I) were detected at autopsy in patients who died from causes other than prostate cancer. The patients staged A_1 or A_2 with symptoms were those resulting from benign prostatic hypertrophy (BPH). Symptoms for patients with stages B_2 through C_2 were most frequently obstruction, frequency, or a combination of these two. "Other" was indicated for a number of these patients as well, which usually reflected hematuria and nocturia. For those with stage D_2 disease, "other" referred to problems caused by metastatic disease, including weakness, anemia, and weight loss. Pain alone or in combination with frequency and obstruction were the most frequent symptoms for patients with stage D_2 disease.

The association between tumor grade and stage is shown in Table IV. Anaplastic tumors were usually stage D_2, occasionally C_1–D_1, but not A_1–B_2 in this series. The earlier stages (As and Bs) tended to be well or moderately differentiated and the more advanced stages (Cs and Ds) tended to be poorly differentiated or anaplastic. At all stages and degrees of differentiation, however, there was some overlap, so that for any given patient, the stage cannot predict grade, or vice versa, with 100% accuracy.

Sites of metastases are shown in Table V for patients that were already stage D when prostate cancer was originally diagnosed and for patients that subsequently advanced to stage D. Note that the numbers of patients are not mutually exclusive, that is, each time a metastatic site is identified, the patient is included for that site; consequently, some patients are included more than once if they had multiple sites. The percentages, however, are based on total number of patients with information on metastatic sites and initial stage. For example, 97% of all stage D patients in this series had bone metastasis. Involvement of lymph nodes was the next most frequent, followed by abdominal viscera, lung, and liver. The distributions were not appreaciably different for patients who were already stage D at diagnosis from those for the patients who advanced to stage D. These data include both autopsy (20%) and clinical observations. Therefore, they may not represent a true metastatic distribution. Autopsies, of course, may reveal more metastases, as evident in Table VI, which shows 3.43 sites per patient. Bone metastases are usually picked up before autopsy, consequently the proportions in Tables V and VI are similar. Many more soft tissue metastases, however, were picked up at autopsy than were apparent clinically.

TABLE II. Distributions of Patients by Year First Seen at RPMI by Orgin of Diagnosis

Year First Seen at RPMI	Diagnosed at RPMI	Referrals	Total
1970	20	11	31
1971	12	21	33
1972	13	30	43
1973	28	73	101
1974	25	43	68
1975	28	64	92
1976	19	129	148
1977	22	117	139
1978	21	102	123
1979	9	94	103
TOTAL	197	684	881

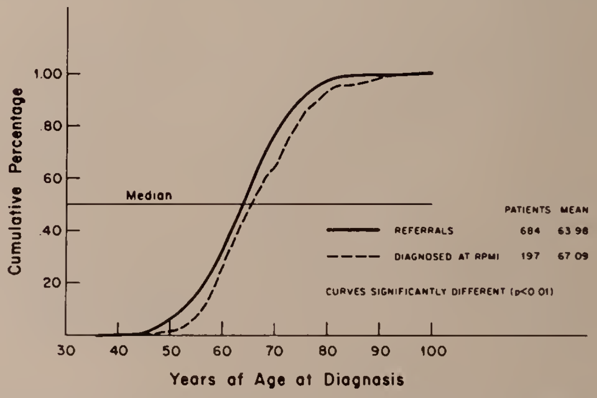

FIGURE 1. Distributions of age at diagnosis of prostate cancer for Referrals to RPMI and for those diagnosed at RPMI, all first seen at RPMI 1970–1979.

TABLE III. Pathologic Stage and Symptoms at Diagnosis of Prostate Cancer 1970–1979

	Pathologic Stage																		
	A_1		A_2		B_1		B_2		C_1		C_2		D_1		D_2		Unknown		Total
Symptoms	#[a]	%[b]	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#
None	70	74	2	25	5	12	2	12	12	10	2	7	7	17	9	3	13	5	122
Pain	1	1	...		3	7	...		2	2	2	7	2	5	80	29	21	8	111
Frequency	3	3	...		3	7	1	6	5	4	3	10	1	2	9	3	11	4	36
Obstruction	11	12	3	37	7	16	5	29	32	28	5	17	5	12	48	17	63	25	179
Combination[c]	5	5	1	12	3	7	4	24	34	30	11	37	6	14	70	25	67	27	201
Other[d]	5	5	1	12	10	23	4	24	25	22	3	10	17	40	38	14	32	13	135
Unknown	...		1	12	12	28	1	6	5	4	4	13	4	10	25	9	45	18	97
TOTAL	95		8		43		17		115		30		42		279		252		881

[a] # = Number of patients

[b] % = Percentage of patients for each symptom based on the total for each stage

[c] Combination of frequency and obstruction for stages A_1–D_1; pain and obstruction for stage D_2

[d] "Other" for stages A_1–D_1 referred usually to hematuria and nocturia; for stage D_2 "other" referred to problems resulting from metastatic disease, including weakness, anemia, and weight loss

TABLE IV. Stage of Disease at Initial Diagnosis Compared to Tumor Grade of Patients Seen at RPMI 1970–1979

	Well		Moderate		Poor		Anaplastic		Other		Unknown		Total
Stage	#[a]	%[b]	#	%	#	%	#	%	#	%	#	%	#
A_1	36	20	9	4	2	1	...		14	22	34	23	95
A_2	3	2	3	1	...		...		1	1	1	1	8
B_1	16	9	16	8	6	2	...		3	5	2	1	43
B_2	4	2	5	2	8	3	...		...		...		17
C_1	25	14	39	19	35	13	1	5	5	8	10	7	115
C_2	5	3	7	3	13	5	1	5	2	3	2	1	30
D_1	6	3	12	6	18	7	1	5	2	3	3	2	42
D_2	32	18	61	30	115	43	12	57	14	22	45	30	279
Unknown	51	29	51	25	71	26	6	28	22	35	51	34	252
TOTAL	178		203		268		21		63		148		881

[a] # = Number of patients

[b] % = Percentage of patients for each stage based on the total for each grade

TABLE V. Sites of Prostatic Cancer Metastasis Reported in Stage D Patients Seen at RPMI 1970–1979

	Diagnosed Stage D Originally		Stage D Developed		Total Metastases	
Sites of Metasases	Patients[b]	%[c]	Patients[b]	%[d]	Patients[b]	%[e]
Bone[a]	280	96	90	100	370	97
Lung	38	13	19	21	57	15
Lymph node	98	34	40	44	138	36
Liver	30	10	17	19	47	12
Abdominal viscera	66	23	39	43	105	27
Other	30	10	10	11	40	10
TOTAL	542		215		757	
Sites per patient[b]	1.86		2.39		1.98	

[a] Bone considered on site, although multiple bones or areas may be involved

[b] Not mutually exclusive, ie, some patients have multiple sites

[c] Percent age based on 292 patients in stage D at diagnosis with information on site of metastasis

[d] Percent age based on 90 patients advancing to stage D with information on site of metastasis

[e] Percent age based on 382 total patients with information on site of metastasis

Two thirds of the patients had involvement of lymph nodes and abdominal viscera, and nearly half had metastases to lungs or liver, or both.

There were some metastatic patients (7% in this autopsied series) in whom bone was not involved, and obviously a substantial number (38%) in whom the lymph nodes were not involved as well. Metastases appear able to involve bone and other sites without first involving lymph nodes, as about 40% of the patients with bone involvement did not have an indication of lymph node involvement at autopsy, although in the majority of cases, both are involved. More than one site (bone counted as one) was found in 80% of the autopsied stage D patients, with one fifth having three, four, and five sites. Thirteen percent had two sites, 8% had six sites, and 2% had seven or more involved sites.

About one quarter of the prostate cancer patients

TABLE VI. Sites of Metastases Determined From Autopsies in 113 Prostate Cancer Patients Seen at RPMI 1970–1979[a]

Site of Metastases	No. of Patients	Percentage of 113 Patients
Bone	105	93
Lung	53	47
Lymph node	70	62
Liver	47	42
Abdominal viscera	75	66
Other	38	34
Total	388	
Sites per patient	3.43	

[a] This tabulation ignores initial stage, consequently some patients not in Table V are included here

in the 1970–1979 series had second primaries, and the most frequent sites are listed in Table VII. Bladder was the most common, followed by skin and lung. Cancers of the head and neck area accounted for 13% of the second primaries. Testes were infrequently second sites. There were 21 patients who had three primary tumors and three who had four primaries.

The types of therapy for stages A_1–C_2 are shown in Table VIII. Most of the patients with stage A_1 disease received no therapy, and as pointed out, about two thirds were diagnosed at autopsy (Table I). All but a few of the A_1s diagnosed from TURP specimens did receive therapy, however, primarily in the form of surgery, as an orchiectomy. Only three received prostatectomies, one of whom also received a hormone, chlorotrianisene NF (TACE), and a lymph node dissection; one also received pelvic irradiation; and one also received a hormone, stilbestrol. Three patients received all three forms of therapy: hormones, surgery, and radiotherapy.

TABLE VII. Second Primaries Among Prostate Cancer Patients Seen 1970–1979

Second Site	No. of Patients	Percent
None	(669)	(77)[a]
Bladder	49	24
Skin	19	9
Lung	18	9
Colon	11	5
Tongue	10	5
Pancreas	10	5
Mouth	8	4
Rectum	7	3
Lymph nodes	7	3
Kidney	7	3
Stomach	5	2
Pharynx	5	2
Larynx	5	2
Esophagus	5	2
Neck	4	2
Testes	3	1
Leg	3	1
Miscellaneous	26	13
TOTAL	202	

[a] Based on total patients minus 10 with unknown presence of second neoplasms (871); other percentages based on total of 202 with second primaries

All of the patients with stage A_2 disease and nearly all of the Bs received surgery alone or in combiation with or followed by hormones and/or radiotherapy. Half of those with B_2 disease subsequetly received all three forms of therapy (hormones, surgery, and radiotherapy). A number of those with stage C_1 disease received only hormones (10%), surgery (14%), or radiotherapy (17%). Patients with stage C_2 disease more frequently received a succession of therapies, although most patients received at least some form of hormone therapy, including diethylstilbestrol diphosphate Stilphostrol (DES), stilbestrol, TACE.

The types of therapy for patients with metastatic disease (stage D_1 or D_2) are shown in Table IX. A few patients received only one or two forms of therapy, but most received at least three, and more than a quarter received all four types of therapy (hormones, surgery, radiotherapy, and chemotherapy). The surgery was orchiectomy in most cases. A few of the D_1s (5) received a prostatectomy and a lymph node dissection. A TURP was performed as well as an orchiectomy in three of the D_1s and in 32 (11%) of the D_2s.

The most common succession of therapies for stage D_2 patients was surgery followed by hormone therapy (usually estrogen, DES, or stilbestrol) and then chemotherapy. Nearly as many patients also received radiotherapy. The total involvement of these four types of therapy most frequently involved surgery, with 79% for D_1 and 89% for D_2. Radiotherapy was the least frequently used of the four types 52% in both stages. Hormones and chemotherapy were each used in 74% to 80% of the stage D patients.

Survival from initial diagnosis according to stage is presented in Fig 2. Except for the stage A patients (the few patients with stage A_2 were combined with the A_1s because their survival distributions and mean values were very similar), there was little difference in survival for the first year, but thereafter differences were marked. By eight years, these differences diminished, especially for the B and C stage groups. Survival of patients with stage A disease, at least for the first ten years after diagnosis, was similar to that of the general population of 65 year old males (see x plots at five and ten years).

Comments

The number of cases with prostate cancer seen at RPMI in the 1970s (averaging 88 per year) was about twice that seen in each of the two previous decades, which averaged 41 and 43 cases per year, respectively.[3,4] Most of this increase has been after 1974, as seen both in Table II and from the yearly average for 1970–1974, which was 47.5 cases.[5] These case increases represent referrals, which have increased within this decade (1970–1979) from 35% in 1970 to 91% in 1979. The number diagnosed at autopsy have remained relatively constant—56 and 74 in the 1950s

TABLE VIII. Types of Therapy for Stages A_1–C_2 in Prostate Cancer Patients Seen at RPMI 1970–1979

Stage	Hormones	Surgery	Radio therapy	Hormones & Surgery	Types of Therapy Hormones & Radiotherapy	Surgery & Radiotherapy	All Three	Nothing	Total
A_1 Patients	2	11	...	6	...	6	3	64	92
(%)[a]	(2)	(12)		(6)		(6)	(3)	(70)	
A_2 Patients	...	3	...	2	...	...	1	...	6
(%)		(50)		(33)			(17)		
B_1 Patients	1	9	2	12	...	5	9	2	40
(%)	(2)	(22)	(5)	(30)		(12)	(22)	(5)	
B_2 Patients	...	2	...	4	...	1	8	1	16
(%)		(12)		(25)		(6)	(50)	(6)	
C_1 Patients	10	18	17	23	3	3	30	1	105
(%)	(10)	(14)	(17)	(22)	(3)	(3)	(29)	(1)	
C_2 Patients	4	1	...	10	2	...	6	...	23
(%)	(17)	(4)		(43)	(9)		(26)		
Total Patients	19	85	21	56	5	13	59	24	282
(%)	(7)	(30)	(7)	(20)	(2)	(5)	(21)	(4)	

[a] (%) = Percentages based on total for each stage

and 1960s, respectively, and 69 in the 1970s (Table I).[3,4]

The average age of patients when first seen at RPMI has decreased significantly from 69 in previous decades to 64.7 in this report.[3,4] Much of this decrease can be attributed to the referrals which, as can be seen in Fig 1, are significantly (P <.01) younger (64 years) than those diagnosed at RPMI (67 years), although even the latter are younger than those of the previous two decades.[3,4] This suggests that patients might be diagnosed at an earlier stage of disease than in past decades, but the comparison in Table X cannot entirely confirm this. There are more patients with stage A_1 or A_2 disease at diagnosis, but there are fewer Bs and Cs and more Ds than in the past. The stage at admission to RPMI was not tabulated in the past, but the current decade averaged two thirds of the cases with stage D disease, with a somewhat higher proportion of Ds in the latter part (70%) than in the first part (65%) of the decade.

These trends in age and distribution of stages of disease suggest that diagnostic methods may be allowing earlier detection of the disease or that it may metastasize sooner than in previous decades. If this were the case, however, survival of the stage D patients shown in Fig 2 would be expected to be better than that of previous decades. Such was not the case, however; in fact, the survival rate was very similar to that of the stage D patients reported for previous decades when patients were older.[3,4] These trends suggest, but of course do not prove, that the age of onset of prostate cancer may be decreasing, ie, that the disease is affecting patients at an earlier age.

Tumor grade distributions have undergone a gradual but significant shift over the years, as shown in Table XI. Considering that the greatest difference is between grades II and III, a comparison of grades I plus II and III plus IV for the past three decades shows a shift in ratio of these two grade groups from 3:1 to 2:1 to nearly 1:1 for the 1950s, 1960s, and 1970s, respectively. Tumor grading is, to some degree, dependent on the training and experience of the pathologist(s) involved, and changing personnel and/or emphasis, experience, and preparation

TABLE IX. Types of Therapy for Stage D Patients With Prostate Cancer Seen at RPMI 1970–1979

Therapy	D_1 Patients	(%)	D_2 Patients	(%)
Nothing			1	0.3
Surgery (S)	1	2.4	7	2.5
Radiotherapy (R)	1	2.4	4	1.4
Hormones (H)	2	4.8	...	
Chemotherapy (C)	2	4.8	1	0.3
S,H	2	4.8	31	11.1
R,H	...		5	1.8
S,R	1	2.4	6	2.2
H,C	1	2.4	...	
R,C	1	2.4	13	4.6
S,C	2	4.8	10	3.6
S,H,C	10	23.8	84	30.1
S,R,C	3	7.1	15	5.4
S,R,H	3	7.1	18	6.4
R,H,C	2	4.8	6	2.2
S,R,H,C	11	26.2	78	28.0
TOTAL	42		279	

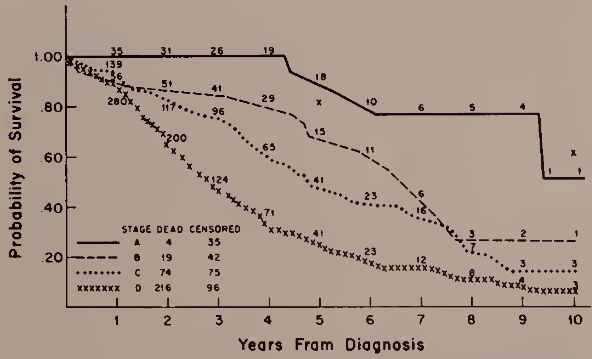

FIGURE 2. Survival from initial diagnosis according to stage for patients seen at RPMI 1970–1979 (autopsy diagnosis not included). (X denotes survival of 65-year-old US males and censored means alive at last contact).

TABLE X. Stage of Prostate Cancer at Diagnosis in Past Three Decades

Stage	1950–1959 Patients	(%)	1960–1969 Patients	(%)	1970–1979 Patients	(%)
A	32	9	17	4	103	16
B	37	11	85	20	60	10
C	117	34	153	36	145	23
D	158	46	171	40	321	51
TOTAL	344		426		629	

ration practices may possibly account for some of this shift. Concerning the increase in proportion of patients with stage D disease (Table X), however, given the tendency for stage D patients to have grades III or IV, as demonstrated in Table IV and as reported in the literature, this shift would be expected.[10]

Symptoms listed for the 1960–1969 series for stage D patients indicated 71% had bone pain, whereas in this series (Table III), pain alone or in combination with obstruction was indicated as present in 54%.[4] It is uncertain whether this decrease in incidence of pain was real or whether there was a change in recording of symptoms. In these data, only the primary complaints for each patient were considered.

The sites of metastases in the current series (Table V) consisted of more sites identified for each patient, averaging around two sites per patient, than were identified in the 1960–1969 series, which averaged around 1.5 sites per patient.[4] When stage D developed in the current series (Table V), the number per patient increased to 2.4, compared to 1.86 in those diagnosed originally as stage D. The increase is evident in all sites, but especially in abdominal viscera other than liver. In the 1960–1969 series, the number of sites per patient was less (1.54) in those developing stage D, compared with those originally diagnosed as stage D with 1.66 sites per patient.[4] It is not likely that the disease has become more virulent, but rather that there has been an increase in the workup and diagnostic efforts, which has led to identify cation of a greater number of metastatic sites. When a thorough examination is performed at autopsy, the number of sites per patient increases markedly—to 3.43 in this series (Table VI).

The metastatic potential of prostate cancer is substantial, since it is capable of spreading to most organs of the body, as is evident from the autopsy data in Table VI and the clinical data in Table V. Obviously, often more sites are involved than are apparent clinically. In the Veterans Administration studies, autopsies revealed bone metastases in nearly every patient, with pelvic bones most frequently involved, followed by vertebrae, ribs, femur, and shoulder. Lungs were involved in 24%, which is less frequent than evident in this series.[11]

TABLE XI. Comparison of Distribution of Histologic Tumor Grades I Plus II and III Plus IV for Past Three Decades

Histologic Tumor Grade	1950–1959 (%)	Decade 1960–1969 (%)	1970–1979 (%)
Grades I–II	76	62	57
Grades III–IV	24	38	43

In a series of 85 randomly selected cases seen at RPMI from 1958 to 1973 and in another group of 85 in the same period seen in University of Iowa Hospitals, all with complete autopsies, it was shown that bone was the most common site of metastases and that both blood and lymphatic pathways contributed to their involvement.[12] Whereas most patients (70%) with bone metastases had lymph node involvement on autopsy, one third did not, meaning that hematogenous routes also played a substantial part in metastasis to the bones, possibly even a major part, as this may have been the route through which many or all of the bones became involved.[12] The observations of patients with lymph node involvement prior to bone involvement, either as stage D_1 or in autopsies, does not necessarily mean that bones become involved via the lymphatic route.[12] Examination of this problem in breast cancer data has led Fisher and Fisher to postulate that tumor cells can reach the blood system directly or through the lymphatics and may be disseminated by both routes, making it impractical to consider them separately.[13] Varkarakis et al also arrived at this same conclusion.[12]

Viadana et al proposed the theory of metastasis through a cascade process in which key organs, eg, lungs or liver, become involved with tumor and, in turn, involve other organs.[14] For the prostate, the key organ in the "cascade" is believed to be bones.[15] There is no doubt that this is the predominant metastatic site as demonstrated in this series and others.[3,4,11,12] This does not necessarily prove, however, that other sites are seeded from bones rather than the primary, as has been argued on the basis of statistical theory and analysis.[16] Sites other than bones do become involved first, not counting lymph nodes, which are often involved first as a result of their location in the lymphatic chain, which is one of the primary routes of metastasis. First sites of metastasis have been noted to include lungs, liver, and bladder, although the latter is felt to be involved via direct extension, as are, of course, seminal vesicles on occasion.[12] This is a difficult question to entirely resolve. Nevertheless, bone metastasis and the resulting pain associated with it remains as one of the most troublesome clinical problems in patients with advanced disease.[17]

TABLE XII. Comparison of Causes of Death in RPMI Patients in 1960–1969 and 1970–1979

	1960–1969		1970–1979	
Cause of Death	Patients	(%)	Patients	(%)
Prostatic carcinoma	158	57	367	65
Other neoplasms	41	15	50	9
Cardiovascular	39	14	28	5
Respiratory	18	7	73	13
Other	20	7	46	8
Total	276		564	

The incidence of multiple neoplasms diagnosed among the prostate cancer patients seen during the decade of the 1970s (Table VII) was 23%. These were not from an autopsy series, otherwise the incidence might have been higher, although a small series of 109 autopsied prostate cancer cases is reported in the literature to have had 22 (20%) with multiple primaries, several with three, and two with five different primaries.[18] In this series, 21 of the 202 patients (Table VII) had three primaries and 3 of them had four. Multiple primaries in these two prostate series included nearly every organ and site in the body, but both series more frequently included bladder, colon-rectum, and lungs.[18] Prostate cancer may be among the sites more frequently associated with other primaries, as the reported incidence of multiple primaries among cancer patients in general is markedly less (1–10%) than this.[19] In a series of over 5,000 cancer cases of all types, multiple primaries were observed in 5%, and cancers that were found more frequently than expected (based on New York State age-specific rates) included skin cancers, which had the highest excess cases (7.1 times expected), followed by prostate, with 2.42 times the expected number of cases.[20]

The primary causes of death for the 1960s and the 1970s are shown in Table XII. The proportion of deaths attributed to prostate cancer has increased substantially to nearly two thirds (65%). This is attributed to the increasing proportion of cases with stage D disease (Table X), for which the predominant cause by far is prostate cancer.[4] These causes are markedly different, and should not be confused with immediate causes, which show infections and associated respiratory failure to be the most common immediate cause of death among cancer patients.[21]

Treatment data for a series such as reported here, even as only general types, are difficult to summarize in a meaningful way, as nearly every possible combination of therapies was utilized. This is readily apparent from Table IX, although the traditional hormonal approach, either directly or with orchiectomy, was involved in all but 12% of the D_1s and in all but 7% of the D_2s. It is noteworthy that chemotherapy was involved in all but one quarter of the patients for stages D_1 and D_2. The proportion may be even higher, as patients seen near the end of the decade have not completed all the therapies open to them, with chemotherapy sometimes being one of the last forms of treatment. Until the 1970s, chemotherapy was not mentioned as a form of therapy for prostate cancer.[3,4] Outside of research centers, chemotherapy is still infrequently indicated in the treatment of stage D prostate cancer, as reflected by the survey of prostate cancer conducted by the American College of Surgeons Commission on Cancer in 1980.[6,7] As continuing research by the National Prostatic Cancer Project and other groups progresses, however, it is expected that chemotherapy will play a more prominent and earlier role in the treatment of prostate cancer.[9]

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Who Will Treat the Impoverished Mental Patient?

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The mental health delivery system currently finds itself at the end of a decade in which deinstitutionalization has produced pain, suffering, and disruption of unprecedented proportions, both to the individuals affected and to the communities in which these people have relocated. Nationally, the institutionalized chronic psychiatric population decreased from 650,000 in 1965 to less than 250,000 in 1980. Comparable figures exist in New York State, where the census of State psychiatric facilities dropped from 85,000 to approximately 25,000. It is currently estimated that between 40,000 and 70,000 deinstitutionalized patients "reside" in New York City. To compound the problem, there now exists an ever-increasing number of "young" chronic psychiatric patients, one third of whom have never been treated in State psychiatric institutions.[1]

What are the factors that have led to the creation of a system in which mental health services have become rationed and human dignity sacrificed? The specific data to be cited refers to New York City and State; however, they illustrate a parallel situation existing in most other major municipalities in this country.

Historical perspectives

Prior to 1930, psychiatric patients in New York City who exhibited more than transient mental illness were sent to one of six large State hospitals within a 75-mile radius of the City. In 1955, long-term inpatient treatment in a State institution was the accepted norm for chronic psychiatric illness; as recently as ten years ago, the median length of State hospitalization in New York was six years.

The 1950s ushered in major changes in both the theory and practice of psychiatry, particularly in the treatment of the chronically ill. The discovery of the major tranquilizers revolutionized the management of hospitalized patients; concurrently, Jones[2] presented his work on the therapeutic community and the "open door policy." [2] This progressive approach to inpatient treatment, coupled with the availability of neuroleptics, set the stage for the present dilemma.

The Community Mental Health Centers (CMHC) Act of 1963 called for construction grants for community mental health centers which would house multiple services and provide comprehensive psychiatric care for the residents of a given community.[3] Community mental health centers have functioned most effectively in those communities with a homogeneous socioeconomic and ethnic makeup. In areas where hospital-based programs and CMHCs have coexisted, the problems of gaps in some services and duplication of others have resulted in waste and less-than-optimal functioning. The delivery of mental health services has also been affected by the change in commitment statutes and federal and state judicial decisions supporting the concept of "the patient's right to treatment." [4] This has made it virtually impossible to provide even marginal care in many areas due to inadequate staffing, physically outmoded facilities, and a paucity of ambulatory resources. The introduction of federal funding in the form of Medicare and Medicaid also altered the delivery of health care. These programs allowed patients supported by public assistance greater freedom of choice as to where they would receive medical care. The composition of inpatient psychiatric services has undergone significant change, with Medicare-Medicaid patients now comprising 90% of the psychiatric inpatients at some voluntary hospitals. These changes have been encouraged by the Joint Commission on the Accreditation of Hospitals, which does not differentiate between standards for privately funded institutions and those funded by municipalities or the State. In the past, these institutions had different goals and objectives as well as sources of funding.

Deinstitutionalization

In 1968 New York State mandated the release of patients from custodial care and instructed the directors of State psychiatric facilities to assume leadership in providing treatment modalities outside of their institutions.[5] Later years showed that this placed a disproportionate fiscal and emotional burden on communities responsible for large numbers of patients, while the thousands of people discharged to the community only became victims in the "revolving-door syndrome." [6–10] The administration of tax levy funds allocated by the State of New York Department of Mental Hygiene has been one of the major problems New York State has faced. Approximately 90% of the available public funds for psychiatric services remain within the State hospital system, with only 10% of these funds allocated for local services despite a 70% decrease in the State's inpatient population during this decade. More important, the State hospitals have assumed the role of acute inpatient care providers with an average length of stay of less than 30 days for new admissions. Consequently there are now no public hospitals that deliver intermediate and long-term psychiatric care. This situation is further illustrated by the fact that the two publicly supported male shelters in Manhattan are currently occupied at over 200% capacity; it is estimated that between 30% and 40% of these individuals are chronic psychiatric patients.

A major paradox in providing adequate care to psychiatric patients has been the development of increasingly stringent admission criteria for inpatient psychiatric services to adapt to the reduced number of available beds. As a result patients in need of hospitalization frequently must wait hours or even days for a bed, and numerous individuals who would have been hospitalized in the past are returned to the streets. The municipal hospital system consistently runs at approximately 100% occupancy and the voluntary system at over 95% occupancy.

Delivery of local services

Bellevue Hospital was traditionally the major resource for acute psychiatric hospitalization in New York City, while intermediate and long-term hospitalization was the responsibility of local State hospitals. The psychiatric division of Bellevue contains 305 beds within a 1,200-bed general hospital. In 1963 Bellevue Psychiatric Hospital admitted 18,157 patients, 59% of whom were male, while in 1980, 4,774 patients were admitted, of whom 71% were male (Table I). During the same period Manhattan Psychiatric Center, the State institution to which Bellevue transfers patients in need of further hospitalization, dramatically reduced both its inpatient census and its average length of stay. The census decreased from over 4,000 to less than 1,300 patients with an average length of stay of 31 days for new admissions.

Table I. Admissions to Bellevue Psychiatric Hospital

Year	Total Admissions	No. (%) Males
1960	17,477	10,027 (57)
1963	18,157	10,798 (59)
1966	15,706	9,689 (62)
1969	11,070	7,007 (63)
1972	9,511	6,400 (67)
1975	8,015	5,357 (67)
1978	5,260	3,523 (67)
1980	4,774	3,382 (71)

Why have admissions to Bellevue fallen so precipitously since 1963? This period coincides with the growth of the community mental health movement and deinstitutionalization. During this time, acute psychiatric beds were developed in local community hospitals and Bellevue was encouraged to serve its own catchment area, although it continued to function as backup hospital for other areas of metropolitan New York City. A further reduction in census occurred in 1977, when the Joint Commission on the Accreditation of Hospitals ruled that dormitories be eliminated and replaced with single double rooms, resulting in a significant decrease in the inpatient capacity of the hospital. In 1975, 8,015 patients were admitted (Table II); in 1978, 5,260 were admitted. More significantly, in the transitional year 1977 the percentage of patients admitted dropped from 60% in January to a low of 42% in November (Table II). This change reflected a de facto increase in the stringency of admission criteria due to the decreased bed capacity. This trend continues to the present as demonstrated by a decreased admission rate of from 63% in 1973 to 45% in 1980 (Table III). This completed the progression from a receiving hospital with an expandable census of 305, 15 years later. The loss of approximately 25% of Bellevue's beds since 1977 has resulted in recurrent crises, since it is frequently impossible to locate available psychiatric

Table II. Adult—Civil Admissions (1977)

Month	Evaluated	No. (%) Admitted
Jan	951	575 (60)
Feb	825	470 (57)
Mar	932	562 (60)
Apr	867	497 (57)
May	853	474 (56)
Jun	880	471 (54)
Jul	889	488 (50)
Aug	973	489 (50)
Sept	818	400 (49)
Oct	835	410 (49)
Nov	879	372 (42)
Dec	826	378 (46)

Table III. Adult—Civil Admissions

Year	Evaluated	No. (%) Admitted
1973	13226	8441 (63)
1974	13396	7451 (56)
1975	11978	7049 (59)
1976	11922	7271 (61)
1977	10528	5586 (53)
1978	9181	4500 (49)
1979	9990	4804 (48)
1980	8264	3759 (45)

Table IV. Readmissions—Transfers

Year	% Readmitted Within 60 Days of Discharge	% Transferred to State Hospital
1975	16	26
1976	13	23
1977	11	19
1978	12	20
1979	10	18
1980	9	16

beds for acutely ill patients at any New York City facility.

The progressive increase in the percentage of male admissions has had significant impact. Male patients are bigger, potentially more violent, more difficult to treat and manage, and are often selectively transferred by other facilities unable to manage them. In New York City only Bellevue and Manhattan Psychiatric Center admit a majority of male patients. The "new" chronic patient in the New York metropolitan area is typically male, age 20 to 50, and potentially violent.

Table IV demonstrates the fact that the readmission rate to Bellevue within 60 days of discharge has decreased during the second half of the decade despite the fact that fewer patients, in both the absolute and relative sense, are being transferred to the State facility. Even more dramatic is the fact that the percentage of patients transferred to the State hospital has steadily declined from 36% in 1966 to 16% in 1980. Finally, the second half of the 1970s saw a decrease of both first admissions and readmissions to the State psychiatric facility. The relative inability to utilize the State facility, combined with an increasingly sick population requiring longer hospitalization, together with the lack of community resources in the form of alternative levels of care and housing, have resulted in an increase in the average length of stay at Bellevue from 15 days in 1978 to 22 days in 1980. Furthermore, the percentage of "undomiciled" patients increased from 10% in 1977 to 30% in 1981.

Comment

In the early 1970s, while deinstitutionalization was in full swing, it was anticipated that broad-based comprehensive programs would provide a sophisticated mental health delivery system with the complete range of services for all patients. The end of the decade found tens of thousands of deinstitutionalized patients living in the squalor of single room occupancy hotels and on the streets, victims of the revolving door syndrome. Supportive services in the community have dwindled and inpatient services in the public sector have become restricted to only the most severely disturbed patients. For the impoverished mental patient, the situation is especially bleak. The chronically ill must negotiate the cycle between hospital and inadequate community supports. Even if funding for adequate community programs were available, research has demonstrated that the success of support programs is dependent on an intact social network.[11–14] Unfortunately, social support systems are virtually nonexistent for the population in question.[15]

The difficulties are conceptual as well as fiscal. Planning has traditionally been developed in a relative vacuum devoid of significant input from those who must implement policy. There has been a failure to acknowledge that services offered by diverse providers should supplement rather than compete with each other. Pilot projects have been either virtually nonexistent or have focused on highly selected patient populations with unusually favorable staff-patient ratios, making replication of these programs impossible. Regulation and funding have come from various administrative levels, often with contradictory and irreconcilable demands, goals, and objectives. The system is saddled with policies and programs set in motion at a time when our society was economically expansive. The current climate of retrenchment prohibits us from offering a full range of services in every neighborhood, even if this were demonstrated to be the most effective means of health care delivery.

The assumption that few if any patients require extended hospitalization has had particularly destructive sequellae. Experience with those who are repeatedly hospitalized indicates that there is a subgroup that cannot function outside of a structured setting and another whose therapeutic response and recidivism are improved with intermediate-term hospitalization. Policies leading to the dismantling of intermediate and long-term facilities must be reassessed in light of later clinical experience. Each component of the system should be reexamined in an effort to create a whole that is greater than the sum of its parts. On the local level, expensive mental health services must be regionalized and programs planned to meet the unique needs of a specific community, while still maintaining the overall objectives of the health delivery system. Although a full range of services should be provided, contiguous facilities cannot afford costly duplication. Finally, residency programs must include not only the treatment of the chronic psychiatric patient as an integral part of their training programs, but must also emphasize the positive aspects of working with these patients.

Health care is a precious commodity and with shrinking public funds for essential services, the allocation of financial support must be made responsibly, with attention paid to human and scientific values.

Summary

Deinstitutionalization has seen the chronic institutionalized psychiatric population decrease by two-thirds since 1965 and has left in its wake pain, suffering, and sacrifice of human dignity of tragic proportions. Compounded by the problems of an inflation-ridden society, mental health services in the public sector have become increasingly restricted to only the most severely disturbed individuals. In the last 15 years New York has decreased its State hospital population from 85,000 to 25,000. In 1970 the median length of State hospitalization in New York was six years; currently, for new admissions it is less than 30 days. Services also have been reduced in the acute sector. In 1963 Bellevue Hospital admitted 18,157 psychiatric patients; in 1980, only 4,774 patients were admitted. The factors responsible for the reduction in services are reviewed and suggestions made for restructuring the mental health delivery system in a fiscally responsible manner. The data presented refer to New York; however, the situation is similar in most other major municipalities.

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Multiple Trauma

A disease entity

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For multiple trauma, Chan et al use the definition "a posttraumatic complex involving at least two injuries, each of which required hospital admission in its own right."[1] In a report on infection and trauma, Allgower et al define "polytrauma" as an injury to any body cavity, together with one or more major fractures of long bone and pelvis or vertebrae.[2] He states that extensive soft tissue damage may be considered as equivalent to a major fracture. The currently accepted indices of injury severity do not define multiple trauma but do provide a formula to relate the magnitude of injury to the prognosis of the patient. As an example, trauma measured by the injury severity score (ISS) is a function of the square of the three most seriously involved body areas categorized according to the extent of injury to an individual area, the abbreviated injury scale (AIS).[3]

Multiple trauma and military-civilian experience

There are similarities between modern military and civilian trauma. The military and civilian capacity to rapidly transport the injury victim has affected the correlation between the condition of patients at the time of arrival at a trauma treatment facility and the patient prognosis. In the technologically proficient medical setting, patient resuscitation is very often performed rapidly. Yet the initially stable patient may expire at a later time from several complications of serious multiple injury. Trauma to multiple organs and systems will have secondary effects compounding the insult produced by the specific injuries. Pulmonary insufficiency, fat embolization, negative nitrogen balance, and vulnerability to sepsis and multiple organ failure are such effects. In both the military and civilian trauma experience, there is a high immediate mortality in the severely injured patient or shortly after arrival at an appropriate treatment center. In the Viet Nam experience, 56% of deaths occurred with a 33% mortality in the operating room in the first 24 hours.[4] In the report of trauma deaths from San Francisco by Baker et al,[5] 53% of the patients were dead at the scene of the injury before transport could be accomplished, 7.5% of patients died in the emergency room, and 39.5% died in the hospital. McNamara and Stremple[6] reviewed the causes of death following combat injury in an evacuation hospital in Viet Nam and found death was caused by hemorrhage, pulmonary insufficiency, and sepsis.[6] Nearly one half the patients in their series died shortly after admission. In further review, this group of patients appeared to be so severely injured that survival seemed unlikely. Pulmonary insufficiency was the cause of death in the majority of patients thought to be potentially salvageable. From this study, it is evident that rapid and adequate volume resuscitation is important in the management of the military casualty; however, there is a potentially definable group that will expire despite all available standard efforts.

With advances in the techniques for the transport of injured patients, we will continue to narrow the interval between the time of injury and the initiation of resuscitation efforts. However, limited progress can be made in this sphere, and eventually there will be better definition by either scoring indices or other measures to specify the patient who is beyond resuscitation. In the trauma death report by Baker et al,[7] analysis by indices reveals that only 1.3% of patients with an ISS greater than 60 lived longer than one week and 6.2% of 289 patients with scores of 30 to 60 lived more than one week.

Central nervous system injury combined with other body region or system injury results in a high mortality and morbidity. The mortality rate for chest and abdomen or pelvis injuries is 36%; for central nervous system and chest injuries it is 50%, and for central nervous system and abdomen or pelvic injury it is 55%.[8] The contribution of craniocerebral trauma to the mortality for civilian injuries in the San Francisco series was impressive in that over 50% of the patients died of primary brain injury.[7] The other major cause of death was blood loss due to major cardiac, vascular, or liver injury. Injury multiplicity is characteristic of military conflict. Heaton[9] reports that for 3,154 patients in World War II the injury-to-patient ratio was 1.55. Feltis[4] stated that in Viet Nam the ratio was 1.66 injuries per patient. The experience with multiple injuries on an urban general surgical service at the North Central Bronx Hospital in New York City for the period between March 1978 and March 1980 includes 504 patients admitted with the primary diagnosis of trauma. There were 110 patients, or 21.8%, who suffered multiple injuries defined as multiple system, region, or organ injuries. There were 42 deaths in the 504 patients overall, and 20, or 47%, of deaths occurred in patients with multiple trauma. There were 18 deaths of patients with gun shot wounds, and 16 patients suffered blunt injuries; 8 deaths were patients with stab wounds.

Injury to multiple organs in a given system without injury to other systems or body areas has not traditionally been considered in the category of multiple trauma, but should be included. Most of the reports on multiple injury have dealt primarily with civilian vehicular trauma, with less attention to assault-related injuries. Injuries sustained in the "urban" environment represent a trauma entity and need study and efforts at prevention.[7,10]

Many reports in the literature link specific individual organ injuries with associated other abdominal organ trauma. With the multiple viscera involvement with blunt abdominal trauma described by Kleinert and Romero in 1961,[11] the mortality rate with one organ involved was 8%, two organs 38%, and three or more organs 70%. For penetrating injuries to the abdomen, a similar pattern of escalating mortality rate was reported by Wilson and Sherman.[12] Abdominal organ injury and extra-abdominal organ injury occur rather commonly. In a report by Steele and Lim[13] on splenic injury, 116, or 63%, of 183 patients with blunt injury involving the spleen had 291 associated injuries.

Trauma assessment systems

The categorization of the severity of the disease of acutely ill patients and the initial recorded assessment by ambulance personnel are important to the development of workable standards of acute injury care. The injury severity indices that have been described correlate with mortality and biochemical variables. The refinement of indices and injury categorization provides emergency services personnel and trauma medical trainees with a full appreciation of the magnitude of one form of system injury in relationship to another and the additive effect of multiple system trauma. The general principle that head and neck, abdomen, and chest are highly vulnerable regions for serious life-threatening injury and that cardiovascular instability or multiplicity of injury with major open fractures further increases the severity of the injury is incorporated into most trauma assessment scoring systems.

Proper clinical evaluation should be sequential and standardized for purposes of defining treatment priorities and is valuable to the education of trauma care personnel. However, some of the structured evaluation systems have considerable complexity and therefore the systems will only have value for retrospective evaluation, comparative data studies, and clinical research. With acutely injured patients, time is not available for the determination and notation of detailed injury categorization. On the other hand, the categorization for hospitalization at an appropriately staffed hospital is one use for the more simplified trauma indices that justify the time taken to make relatively limited determinations. The field categorization of trauma patients developed by the American College of Surgeon's Committee on Trauma is an example of a simplified system. Lindsay's[14] trauma index and Ogawa's[15] modification of the trauma index are other relatively easy systems for prehospital categorization.

Trauma-related scoring systems

The various currently described indices and their relative value have been reviewed by Cayton and Evans.[16] The trauma index uses numerical scores for region, type of injury, cardiovascular status, respiratory status, and consciousness. Thus, the body area involved, the cause of the trauma, and the condition of the patient measured by clinical evaluation and assessment of mental status are all integrated in the derived numerical score.[17] Unfortunately, the system is only numerical in the region-type injury and blood pressure values. The AIS is a numerical score for the individual injuries.[18] Using the AIS, the injury is categorized by body area including head and neck, face, chest, abdominal or pelvic contents, extremities or pelvic girdle, and severity (1 minor, 2 moderate, 3 severe, not life-threatening, 4 severe, life-threatening, survival probable, 5 critical, survival uncertain). The comprehensive injury scale includes a category for threat to life, permanent impairment and treatment. The ISS is derived from the abbreviated injury score and can be determined by using the sum of the square of the highest AIS values in each of the three most severely injured parts of the body.[3] The range of scores is 0 to 75. The therapeutic intervention scoring system and the cumulative illness rating score are comprehensive illness scales that are not primarily indices of trauma.[16]

Following is an outline of trauma-related scoring systems:

Trauma index
Modified trauma index
Abbreviated injury scale (AIS)
Comprehensive injury scale
Injury severity score (ISS)
Therapeutic intervention scoring system
Cumulative illness rating score
Anatomic index (AI)

Clinical studies have confirmed the reliability of several of the injury score systems. The AIS and the ISS correlate with mortality.[3,19] The ISS has been confirmed as reliable in relationship to a number of other clinical criteria. Patients with scores below 50 had the best potential for survival. Most of the patients who died in this group were alive one hour after injury. Baker and O'Neill in 1976[19] reported confirmation of the value of the ISS in comparing the data from 1,033 hospital inpatients treated in the

Birmingham (England) Accident Hospital and 2,128 highway injuries at eight Baltimore (Maryland) hospitals. A correlation of the ISS with disability and mortality was demonstrated. Oppenheim et al reviewed the ISS in relationship to initial blood metabolite concentration and subsequent biochemical changes in 33 injured patients. The effort was designed to ascertain if biochemical variables have a direct and predictable relationship to injury severity. At four hours after injury, severity related directly to blood lactate, pyruvate, and alanine. In 19 patients daily nitrogen, histidine, and 3-methyl histidine excretion were measured for seven days. Only total urinary nitrogen was clearly related to injury. A recent report by Champion et al introduced a new ISS called the anatomic index (AI).[21] Despite the good correlation of the ISS with the variety of injury parameters, the categorization of patients using the ISS system depends on subjective determination of the injury severity. Champion et al substitute the probability of mortality for individual injuries for the use of the abbreviated injury score. They further utilize the international classification of disease-adapted (ICDA) code as part of the system. In his report, the ISS was compared with the AI for accuracy and the AI predicted more deaths than did the ISS; the AI overpredicts mortality rate and the ISS underpredicts mortality rate. The suggested advantage of the AI is that it utilizes a classification system that is familiar to most hospitals and medical records personnel and is easily adapted to computer use. Although ISSs and classification systems have not been used in most hospitals, the current development and study of these systems will achieve local as well as international correlation of data on injury.

Systemic effects of multiple injury

A sequence of hemodynamic and metabolic changes occurs after multiple trauma and the resuscitation of the multiple trauma patient. These events precipitate secondary and tertiary reactions that contribute to the ultimate patient outcome. Despite the use of appropriate measures for patient resuscitation and the appearance of an initially good immediate clinical response, some patients suffer demise after days or weeks of heroic critical care efforts. Sepsis, pulmonary insufficiency, multiple system organ failure, and stress bleeding are frequent terminal complications in the clinical course of the multiple trauma victim.

The several effects of massive trauma are changes in coagulation parameters, impaired host defense by depressed reticuloendothelial system function, immunologic deficiency, hypoxemia with elevated free fatty acids, and impaired hepatic function.[22-24] Systemic infection is a frequent complication for the multiple injury patient. Despite the availability of potent and highly specific antibiotic preparations, the demise of the injury patient often results from sepsis. Fry et al[5] reported 553 surgical patients at risk for multiple organ failure following major surgery. There were 378 patients who had emergency surgery for traumatic injuries and 175 patients who had emergency procedures for reasons other than trauma. The criteria in detail for defining respiratory, renal, hepatic failure, and stress bleeding were specified. In the analysis of the results of the study of Fry et al,[5] it was noted that for organ failure involving single organ systems, renal failure carried the highest mortality (72%) and liver failure carried the lowest (53%). The evaluation of multiple organ system failure (MOSF) revealed a progression of mortality with the number of organs involved from 30% for a single organ to a uniformly fatal outcome if there was four-organ failure. Of the 55 patients who died postoperatively, infection was the cause of death in 32. The cause of infection in Fry's series was principally pulmonary and abdominal.

The vulnerability of the multiple injury patient to bacterial invasion and sepsis relates to several effects of massive trauma. The catabolic influence of hypermetabolism and the resulting immune deficiency may contribute to the development of systemic infection.[25] The occurrence of reticuloendothelial system function deficiency demonstrated in the trauma patient is not clear in its influence on the resistance to bacterial invasion. However, it has been postulated that the effects of high blood levels of microaggregates and dysfunction in reticuloendothelial clearance capacity may reduce host defense. Effeney et al[26] studied 48 patients with multisystem injury or nonseptic surgical illness. Massive transfusion is responsible for the introduction of platelet clumps, dead cells, and other particulate matter into the pulmonary circulation. This may be added to the fibrin and platelet microemboli released by the syndrome of disseminated intravascular coagulation. Some disseminated intravascular coagulation is common with extensive soft tissue injury and release of large amounts of thromboplastin. Further evidence for the occurrence of impaired host defense is the rapid drop in blood opsonic protein (α-2-globulin) following injury, inhibition of lymphocyte function by fibrin degradation products, and the consumption of complement associated with intravascular coagulation.[27] Sepsis and infused debris have both been implicated in the etiology of respiratory insufficiency. Polk[28] has suggested that the two factors may be related in that a more active neutrophil population is aggregated in the pulmonary capillary bed and the resulting decrease in the effective circulating population of the neutrophils may affect resistance to infection.

Several classic studies have confirmed the occurrence of accelerated catabolism with multiple trauma.[29] In addition to the catabolism associated with the initial stress of trauma, the multiple secondary problems of infection, fever, and the demands of wound healing all compound the negative nitrogen balance of multiple injury. The need for nutrients in the form of early enteral and parenteral administration of protein and calories using carbohydrates and fats has gained increased attention as an important priority in the support of the multiple injury patient. The rapid development of protein-calorie malnutrition as a result of negative balance will affect the patient response to infection, wound healing, and respiratory function. Although the routine surgical patient will rarely require extraordinary nutritional support, the massively injured patient needs such support. Trauma to the abdomen, thorax, and extremities usually affects a patient's ability to ingest an adequate diet. Aside from the mechanical interference with alimentation caused by gastrointestinal injuries, the pain of major chest and extremity trauma and the effects on mood and appetite of analgesics and pulmonary problems will further prevent adequate enteral nutritional support. The aggressive use of nasogastric, jejunal, peripheral, or central-line intravenous techniques for feeding should be considered.

Comment

Multiple trauma should be considered as a disease entity and not simply as a collection of bodily insults. The response to massive injury is complex and needs careful metabolic evaluation and management. With modern transport, communication, and assessment, categorization of multiple injury will allow the traumatologists to anticipate the need for aggressive systemic supportive measures as well as allow accurate prediction of the likelihood of success.

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Sexually Transmitted Diseases and Child Sexual Abuse

Part II

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Part I discussed epidemiology and diagnosis of child sexual abuse. The problem is of substantial magnitude and sometimes causes diagnostic difficulty. It is most important to make the correct diagnosis, as sexually transmitted diseases in children disclose previously undetected child sexual abuse. A high index of suspicion is important to detect child sexual abuse generally and is of particular importance in diagnosing gonococcal infection. This article focuses on the management of pediatric gonococcal infections resulting from sexual abuse.

Clinical picture of pediatric gonorrhea

In female children, gonococcal infections are characterized by a vulvitis or vaginitis together with erythema, edema, pruritus, excoriation, and often dysuria and pyuria. The thinness of the vaginal wall and its alkaline pH increases susceptibility to *Neisseria gonorrhoeae.*[1] The pediatric cervix is cryptiform with few endocervical glands, making it less susceptible to infection. The subsequent development of endometritis and salpingitis is not common in this age group, although gonococcal peritonitis has been described.[2] After the hormonal changes of puberty, the lining of the vulva and vagina becomes thicker thus offering resistance to penetration by the gonococcus. Healthy postpubertal females rarely develop gonococcal vulvovaginitis; genital infection in these women involves the urethra, cervix, uterus, and fallopian tubes.[1] Proper investigation of the "sexually inactive" prepubertal girl with vulvovaginitis must include a search for the pathogens that are associated with genital infection in sexually active adolescents and women.[3]

Male children with urethral gonorrhea may have mild to copious purulent discharge, dysuria, and possibly genital pruritus. At least one case of testicular swelling has been reported.[4] In the sexually abused child, the presence of symptomatic genital infection does not eliminate the possibility of asymptomatic rectal infection, and, therefore, rectal cultures are required even on symptomatic male children in order to reveal additional information on the pattern of abuse. Disseminated infection such as endocarditis and meningitis is uncommon in children,[2] although arthritis has been described.[5]

Complications of sexual abuse

In children, genital injuries may be subtle and yet serious if not recognized. The extent of vaginal trauma is often unappreciated prior to speculum visualization of the vagina. In one series, 35% of the children (30 cases) had documented abnormalities, with two cases of vaginal lacerations requiring surgical repair.[6] Penetrating wounds through the vagina into the bladder, rectum, or peritoneal cavity may occur without external bleeding and may be overlooked if a careful examination is not performed.[7] The presence of blood in either urine or stool may be the only early sign of such injury. Every physician who examines and treats children should be familiar with the normal genital anatomy of the prepubertal female and capable of performing the examination, recording findings, and referring the patient to a gynecologist if abnormalities are found.[1]

Management of sexual abuse

Since sexually abused children also may have been physically abused and injured, a thorough physical examination and history is necessary for legal documentation of sexual abuse[7-14] and for appropriate medical management.[8] Examination with skeletal x-rays for children under six years of age may yield evidence of old or recent fractures. The child should be adequately prepared for the examination; at no time should procedures be forced upon the sexually abused child.[7] This can add to psychologic trauma already sustained.[8,13] Sedation or general anesthesia has been recommended as a rare expedient for children in whom genital examination would pose added insult.[6,8,13]

The external genitalia should be inspected for scratches, contusions, erythema, vaginal or urethral discharge, and seminal-appearing secretions. An infant-sized vaginal speculum or nasal speculum can be used to spread the vaginal orifice. A view of the cervix provides little information, therefore no great effort is made to see it. In girls, the size of the vaginal opening, condition of the hymenal ring, and diameter of the hymenal opening should be documented. Aspiration of the vaginal contents can be effected with a sterile medicine dropper. Motile spermatozoa can be detected up to six hours after intercourse, while nonmotile spermatozoa can be seen in Gram-stained smears from seven to 12 hours after intercourse.[13] When spermatozoa are not detected, secretions should be tested for acid phosphatase, which is found in large concentrations in seminal fluid, thereby indirectly verifying the presence of semen.[7] Clothing stains should likewise be tested for acid phosphatase. In addition, pregnancy testing should be done in postmenarchal girls.

Cultures for gonorrhea should be made from pharyngeal, urethral, rectal, and vaginal sites and be repeated in three to four weeks. Gonococcal reinfection indicates that the infected children continue to be subjected to sexual activity with infected individuals.

Baseline serologies for syphilis should be performed. The VDRL should be repeated after three months. Follow-up evaluation is necessary to identify the manifestations of incubating chancroid, lymphogranuloma venereum, granuloma inguinale, genital herpes, trichomoniasis, and candidiasis.

Treatment

The management of sexual abuse is incomplete without efforts to prevent venereal disease. Gonorrhea prevention should be the primary focus, although the incidence of gonorrhea resulting from child sexual abuse may be too low to warrant routine antimicrobial intervention.[9] However, prophylactic treatment is indicated when children have had sexual contact with individuals infected with gonorrhea, have been sexually assaulted by a stranger, or where the physician suspects the child will be lost to follow-up. Prophylaxis can be accomplished by a full course of treatment with 100,000 units of aqueous procaine penicillin G per kilogram body weight up to a maximum of 4.8 million units administered intramuscularly along with probenecid 25 mg/kg orally up to maximum of 1.0 g. This regimen may also offer protection against incubating syphilis. For an alternate and equally effective treatment modality, probenecid can be followed by amoxillicin 50 mg/kg up to 3.0 g in a single oral dose. The drug is well tolerated and produces few side effects. Because the large volume of penicillin needed for treatment requires two injection sites, S. M. Sgroi, M.D., recommends oral administration of an antimicrobial agent to minimize the trauma to the child and ease follow-up visits (conversation, March 23, 1982).

Children with a history of penicillin allergy can be treated with spectinomycin hydrochloride adminstered intramuscularly in a dosage of 40 mg/kg, up to a maximum of 2 g. Infections that are resistant to spectinomycin may require erythromycin (in patients under eight years of age) or tetracycline (in patients over eight years of age), 40 mg/kg up to 2.0 g followed by 10 mg/kg by mouth (500 mg maximum) four times daily for five days.

It is most important that a follow-up culture be performed four to six days after completion of treatment to assess the efficacy of therapy. When the patient is a child, an additional culture should be performed three to four weeks following treatment, in order to detect reinfections.

Psychosocial management

When direct evidence of sexual abuse is found, such as the presence of spermatozoa or gram-negative intracellular diplococci on smear, the child's parents should be informed of the laboratory results and given an opportunity to discuss them.[7] The sexual mode of transmission of gonorrhea should be made clear without speculating on the identity of the source. The communicable nature of STDs, their courses if untreated, the need to identify other potentially infected persons, and the duty to report the case to child protective service authorities should all be explained to the family.[1] The child should be interviewed by a trained professional with adequate time to feel at ease and without parental interference.[1,7] The frightened and apprehensive child should be encouraged to reveal all details concerning the incidents of abuse, including possible times, places, and persons involved.[11] Since young children do not have a well-developed sense of time, they may not be able to answer when and how often an event occurred. It is, therefore, best to determine the time frame with respect to another fixed event, for example, whether or not sexual abuse always occurred during the hours mother was away at work. Open-ended questioning is frequently unrewarding with younger children and it is recommended that specific, nonleading questions be asked.[6] By using dolls or models, the interviewer can point to different anatomic sites and ask "were you touched here?", progressing in small increments from head to genitals. Avoid repeated questioning concerning the abuse, especially during the examination, and try to tape record and transcribe the interview for a permanent record.

The psychologic impact of sexual abuse depends on many factors, among them the age of the victim, the number of occurrences, the relationship of the victim to the abuser, the psychosocial situation of the family, the reaction of the parent and family, and the medical treatment received.[7] The physician should remember it is unrealistic to expect an adult level of cooperative passivity during internal examination, and that it is normal for children to express anxiety concerning the matter.

Medical personnel should acknowlege that child sexual abuse cases have an emotional toll on even the most seasoned professional; too often, unresolved anger and revulsion translates into incomplete investigation.[6] The physician's failure to handle his or her personal reaction to child sexual abuse is one factor in failure to report cases to child protective services.

Child abuse is a major social and judicial concern requiring prompt and effective action. A sexually abused child is legally defined as a child less than the age of 18 years whose parent or other person responsible for care commits, or allows to be committed, a sex offense against the child.[15] Physicians as well as other professionals who would have reasonable cause to suspect child abuse or maltreatment are required by law to telephone the State Central Register on Child Abuse and Maltreatment.[16] Mandated sources follow the telephoned report by a written report (Form DSS 2221-A) within 48 hours from the time the call was made to Child Protective Services of their county. In an acceptable case of child abuse, a child protective worker will investigate the home situation within 24 hours of receiving the report to determine whether the child is at risk by remaining in the home environment and what other services are needed to help the family.

In New York State, the willful failure to report child abuse is a class A misdemeanor[17] punishable by a fine of up to $1,000[18] or imprisonment of up to a year, or both.[19] These penalties are designed to encourage physician reporting, and to effect resultant case investigation. Individuals reporting to the Central Register on Child Abuse and Maltreatment are immune from legal liability when they have acted in good faith.[20]

Protocol for examination of sexually abused children

General physical examination
- Note indicators of abuse or neglect: burns, bruises, fractures
- Perform developmental examination including skeletal x-ray on children under six years

Genital examination
- Inspect and describe genital anatomy: size of vaginal opening, and condition of hymenal ring
- Note abnormal findings: urethral/genital/rectal trauma, presence of foreign objects

Screening
- Gonorrhea cultures from pharynx, urethra, rectum, vagina
- VDRL (repeat at 3 months)
- Aspiration for sperm detection by smear and acid phosphatase technique
- Pregnancy testing on postmenarchal girls

STD Prophylaxis
- Full course of treatment for gonorrhea

Interview
- Question abused child alone
- Question parents alone

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Acknowledgment. The authors gratefully acknowledge the advice given by Suzanne Sgroi, M.D., in the preparation of this paper.

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Scientific Sessions held at
Memorial Hospital
New York City
February 19, 1981

ABSTRACTS AND REPORTS OF PROCEEDINGS

New York Society for Thoracic Surgery

ALLAN ELLIA BLOOMBERG, M.D., Editor

Winter Meeting

The winter meeting of the New York Society for Thoracic Surgery was held on February 19, 1981, at Memorial Hospital, New York City. George Holswade, M.D., was in the chair.

The following article is abstracted.

Two-Dimensional Ultrasound and Cardiac Surgery

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Although the utility of two-dimensional echocardiography in closed-chest patients is well known, its potential advantages in the open chest during cardiac surgery have not been fully explored. Accordingly, two-dimensional echocardiography was employed in 100 patients for anatomic and physiologic studies during cardiac surgery. Standard, commercially available phased-array echocardiography equipment with a gas-sterilized transducer was found to produce surprisingly clear echocardiographic images in the open chest without the need for water paths or conductive gel. Unusual perspectives not permitted by the bony thorax were readily obtained.

Two-dimensional echocardiography detected microbubbles entrapped within the left ventricle in 78 patients at the conclusion of cardiac surgery. It facilitated careful planning of a surgical approach across the interatrial septum to cardiac tumors in two patients. It clearly elucidated the relationship between struts of prosthetic mitral valves and the aortic outflow in 12 patients during mitral valve replacement. In 50 patients, alterations in left ventricular ejection fraction during surgery were detected and characteristically related to specific surgical procedures for acquired coronary and valvular heart disease. Increased ejection fraction after surgery for constrictive pericarditis was also demonstrated. In the closed chest, detection of acute pericardial tamponade and acute mitral insufficiency with preservation of left ventricular function (avoiding cardiac catheterization) were also demonstrated. Increasing left ventricular mass following cardiac transplantation in three patients was also demonstrated, suggesting a noninvasive method for detecting cardiac rejection.

In summary, two-dimensional echocardiography is extremely useful for definition of anatomic and physiologic changes occurring during cardiac surgery. The potential limitations and demonstrated utility of this method should be familiar to cardiac surgeons working in institutions with access to this modality.

Discussion

Robert Frater, M.D., *The Bronx, New York.* It is a pleasure indeed to discuss Dr. Spotnitz's paper. There are, to my knowledge, two places interested in intraoperative echocardiography and they are both in New York and Henry's work has been a source of great interest to us all along. He has now progressed beyond the M-mode echocardiography that we presented to this Society last year by using the two-dimensional (2D) method. He has pointed out the very real problem of the fact that the machinery is expensive and that it is quite hard to persuade an echocardiographer to become involved. The end result is that one has to become an echocardiographer oneself. We have continued to use M-mode echocardiography, thinking that we will get fairly soon to a point where it becomes a useful routine monitoring tool. Henry has pointed out tonight many practical applications of the use of 2D, some of which could as well be done with M-mode as with 2D, but to make it truly useful, we are going to have to make it both quantitative and usable by other than the surgeons. Although, in fact, we used the direct application to the right ventricle a long time ago, we have more recently used transesophageal echocardiography. The applicability of echocardiography is considerably extended if the surgeon does not need to interrupt the operation to hold the probe. As Dr. Spotnitz has pointed out there are real problems in making sure that the alignment is correct.

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* Sponsored by James R. Malm, M.D., New York City.

Here is an example of the changes in ventricular dimension that occur with valve replacement that Dr. Spotnitz has mentioned. After mitral valve replacement for mitral insufficiency the end diastolic volume is diminished, but the end systolic is not changed so that the ejection fraction falls: a degree of imperfect function has been uncovered by the operation.

An application that Dr. Spotnitz hinted at but didn't describe in detail is contrast echocardiography. He showed how easily bubbles are seen in the ventricle; saline injected into the blood stream also shows up as multiple echos. Tricuspid insufficiency can be evaluated by injecting saline into the right ventricle and echoing over the inferior vena cava (IVC). Before surgery, injecting into the ventricle produces a shower of echoes in the IVC; afterwards the injection is repeated and there is a mild scattering of echoes indicating the insufficiency has been corrected. Contrast echocardiography is extremely useful intraoperatively for detecting septal defects and valvular insufficiencies of various kinds. You can even do things such as measuring flow velocities. For example, after injection into the right atrium a shower of echoes appears in the left atrium and it is possible by measuring this slope to calculate a flow velocity at the mitral valve. The scope is enormous. What we have to do is translate this from a research tool to a tool which can be of value to everybody.

I have a question to ask Dr. Spotnitz. At the present time the definition of the endocardium is very much dependent on viewer judgment. Echocardiographers can make these judgments with some reproducibility. Ordinary mortals who watch these movies must wonder how the line was drawn showing the end systolic and end diastolic positions of the endocardium. I would like to ask Dr. Spotnitz whether he thinks there is a solution to this; do you think that this part of the procedure can ever be computerized?

Dr. Holswade: I would like to ask Dr. Spotnitz one question. On your abstract you mentioned that 19 out of the 50 patients* showed micro-air emboli in the left ventricle. Did you do anything about getting these out or do you think that maybe one third of the patients on cardiopulmonary bypass have mitral air bubbles which they can tolerate very well and you just never recognized it.

Dr. Peter Rentrop: Do you have validation of your method which allows ejection fractions to be calculated? It is obvious that you can get numbers, but what do they really mean?

Dr. Spotnitz: I would like to thank the discussants for their comments and interesting questions. It is marvelous that Dr. Frater and I are both working in the same city on intraoperative echocardiography. This is the type of inspiration that leads to progress. Dr. Frater's work is outstanding, and it is very gratifying to note that our conclusions about the effects of the common intraoperative procedures on ventricular function are the same. We are mutually interested in translating intraoperative echocardiography into a clinically useful tool. A major advantage of the hand-held 2D echo probe is that it is possible to measure ejection fraction in less than one minute during the course of an operation. This does not represent a significant impediment, even when we are operating on critically ill patients.

Definition of the endocardium and whether that can be computerized is a complex issue. There is disagreement among ultrasonographers, even among engineers, about where the real interfaces are. Conventions are being established. The answer is that many conventions will work reproducibly, provided that you set up a regression that will allow correction of calculated data to the true value. We have been working in the experimental laboratory now for two years to validate our data. We have regressions by three different laboratory investigators showing the relationship of calculated volume in dogs on cardiopulmonary bypass to angiographic data and also postmortem pressure-volume curves. We find that after someone has worked in this area for a period of time, probably several months, the regressions become virtually identical and indistinguishable, provided that the same conventions are used.

I think that a computerized technique is possible. It would use a video disk and a tracking system to find out where the optical margin is. Examination of serial frames would also help. It would certainly be possible, just very expensive. There are much simpler ways, using the human brain, that are cheaper and probably more accurate.

The ejection fraction data we are using have been validated in 28 patients in our laboratory versus angiography. There are more complete studies validating ejection fraction by echo that have been performed by a number of investigators, including Mike Quinones in Houston. The data can be validated, and accuracy increases with more sections and more complete algorithms. The limitation, however, when using a single short-axis view, involves akinetic or dyskinetic areas, specifically in patients with coronary disease or left ventricular aneurysms. The single section can be an error then, and the more crucial the accuracy of the data is, the more sections you have to take. In dogs, if you take 15 or 20 sections, going from one end of the ventricle to the other, the accuracy is perfect both for mass and volume, but that is a great deal of work and it means several days of work to do one experiment for the study.

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* Original data as presented at Symposium. Dr. Spotnitz has updated his figures to 78 out of 100 patients, as of October 1982—*Ed.*

Dr. Holswade, we are not quite sure of the significance of the microbubbles we observe. The bubbles seem to come primarily from the left atrium. They do not cross the lungs. They do not recirculate. They are usually not prominent with aortic valve replacement alone. But, if the left atrium is vented or mitral valve replacement is done, you see these gray clouds of microbubbles coming out. The microbubbles are small, but they are emboli. They do not pass through the circulation and I think at the present time it is simply speculative whether or not they are damaging to the heart, to the brain, and other parts of the human organism. No gross clinical evidence of emboli has been seen in our patients. Nevertheless, my own view is that these are potentially damaging. Efforts are needed to eliminate such microbubbles from the circulation. At present we do not have the solution, but we are exploring the problem. ■

The following article is abstracted.

Large Arteriovenous Hemangioma of the Chest Wall

Treatment by transarterial embolization and radical excision

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PAUL R. WEISS, M.D.
SEYMOUR SPRAYREGEN, M.D.
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Arteriovenous hemangiomas (AVH) are congenital malformations that may grow to large dimensions. Although AVH are classified as benign, they may infiltrate into adjacent tissue and have a potential for malignant degeneration with spread to regional lymph nodes.

Irradiation, cryotherapy, and injection with sclerosing agents have been used in the treatment of AVH, generally with poor results. Radical excision of the lesion has been the most effective method of treatment for large AVH, whereas incomplete excision has usually resulted in recurrence. Because AVH are extremely vascular, their excision is associated with a high risk of hemorrhage.

Arteriography has become a very effective aid in the diagnostic evaluation and the treatment of AVH. It can delineate the extent of the lesion, identify the sources of its arterial blood supply, and provide a route for their selective embolization. Successful embolization may be the only treatment required for small or a surgically inaccessible AVH. We have recently used arterial embolization to decrease the vascularity of a large AVH of the chest wall, in preparation for radical excision.

A 25-year-old patient was referred to us for treatment of a large hemangioma of the right pectoral area. The lesion had been enlarging since childhood despite irradiation and an attempt at surgical excision. Arteriography revealed a conglomerate of abnormal vessels in the subcutaneous tissue and in the pectoralis major muscle, with many large feeding vessels originating from both internal mammary arteries and the right axillary artery. Embolization of silicone spheres and Gelfoam into these arteries was performed on three separate occasions, resulting in a noticeable decrease in the size of the lesion and in its vascularity. Radical excision of the hemangioma combined with intraoperative, direct embolization was accomplished with minimal blood loss. Postoperative arteriography no longer revealed the presence of tumor vessels. After three years the patient is free of residual or recurrent hemangioma.

Hemorrhage is the single greatest risk associated with the excision of large AVH. This risk can be reduced significantly by the use of preoperative and intraoperative transarterial embolization. Total excision of the lesion is more likely to be accomplished under these circumstances.

Discussion

Robert Rosen, M.D.: Over the past several years, vascular radiologists have begun to apply diagnostic catheterization techniques to therapeutic or interventional procedures. One of the greatest areas of activity has been the development of therapeutic embolization techniques.

The concept of intentional intravascular interruption of blood flow was first applied to the problem of uncontrollable bleeding. Embolization of the hypogastric arteries to control pelvic bleeding in the presence of fractures or tumor is now a widely accepted procedure and may be used in situations where surgical control is difficult or impossible. Several types of gastrointestinal bleeding are also amenable to embolization therapy following angiographic localization.

Many types of embolic material have been utilized, including autologous blood clot, muscle tissue, and Gelfoam, among others. With refinements in technique and the wider application of this type of therapy, it became apparent that there was a need for a variety of materials with differing properties depending on the intended clinical use. Gelfoam and clot fall into the general category of biodegradable agents. These materials are primarily useful in situations where relatively short-term occlusion (eg, one to two weeks) is required, such as bleeding from trauma or superficial erosions where recurrence is unlikely after initial control is gained. These agents are also suitable when used in a preoperative setting to reduce the vascularity of a lesion and thereby lessen blood loss.

Arteriovenous fistulas, vascular malformations, hemangiomas, and tumors present a more difficult problem. In these settings, recurrence may be expected and permanent occlusion is therefore desirable. Permanent or nonbiodegradable embolic materials include polyvinyl alcohol (Ivalon) sponge, silicone microspheres or liquid, detachable balloons, stainless steel coils, and the only true tissue "glue," isobutyl cyanoacrylate (IBCA). Each of these agents has advantages and disadvantages, the choice of material being determined by the clinical problem.

Discrete arteriovenous connections or fistulas can generally be managed using an "internal ligature" approach. In this situation, one or several discrete macroscopic emboli are deposited through the catheter after catheter position is assured. Ivalon sponge resembles Gelfoam and is used in a similar manner, most often as small fragments of 1 to 3 mm injected through the catheter under fluoroscopic guidance. Stainless steel coils, developed by Gianturco and Wallace, have been used with increasing frequency where macroscopic "plugging" of vessels is required. These are small spring-type devices which incorporate Dacron strands to increase their mechanical blocking property. They are available in preloaded cartridges and are among the easiest embolic materials to use. Coils have also been successfully used in cases of massive hemoptysis due to pulmonary arteriovenous fistula, such as those encountered in Rendu-Osler-Weber syndrome.

Probably the greatest hazard of particulate embolization is inadvertent misplacement or migration of emboli to "nontarget" vessels. These emboli are generally not retrievable by catheter technique once they have been deposited, and accidental embolization of the lower extremity, kidney, and lung has been reported. This type of complication can usually be prevented by assuring stable catheter position and careful fluoroscopic monitoring. Flow-guided detachable silicone balloons have recently been introduced which can be inflated, deflated, and repositioned repeatedly until optimum positioning is achieved and detachment carried out. This capacity for precise placement has led to its successful use in the treatment of carotid-cavernous fistulas.

Extensive arteriovenous malformations and hemangiomas are among the most difficult clinical problems in terms of management. Surgical intervention is technically difficult, generally complicated by extensive bleeding, and rarely provides a satisfactory result. Embolization techniques may be used as an adjunct to surgery, as in the case of extensive chest wall vascular malformation presented this evening by Dr. Merav. In this setting, embolization may be carried out with particulate materials, either biodegradable or permanent, as only short-term occlusion is necessary. Preoperative embolization can dramatically reduce the bulk of these lesions and, more important, enable good hemostasis to be achieved during resection.

Embolization has also been used as the definitive form of therapy in cases where complete surgical extirpation is not possible. In this setting, permanent occlusive materials must be used, as recurrence is the rule. Since embolization using macroscopic particulate materials is essentially equivalent to surgical ligation of feeding vessels, equally unsatisfactory results may be anticipated. The ideal agent is one that could deeply permeate the nidus of the lesion and permanently occlude it, preventing ingrowth of new feeding vessels. Materials presently available in this category are Ivalon microparticles, silicon microspheres and liquid, and IBCA. The safe use of these materials requires considerable initial experience in the laboratory, but the results that have been achieved to date in lesions of the head and body have been extremely encouraging. Undoubtedly, materials and devices that are more effective and easier to use are in the near future.

N. J. Sommer, Jr., M.D.: John A. Wyeth, M.D., of New York introduced the injection of boiling water into the vessels of facial angiomas to produce clotting and obliteration of the vascular tumors. The method was rather cumbersome and has obviously passed from use since the discussor seems to be the only member present to have knowledge of this form of treatment. Wyeth had been a Confederate cavalryman who attended medical school following the Civil War. He came to New York City seeking postgraduate education and was the founder of the Polyclinic Medical School and Hospital. The method mentioned was described over 60 years ago.

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The following article is abstracted.

Transluminal Coronary Angioplasty During Coronary Bypass Surgery

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ANDREW J. FRANZONE, M.D.
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From Lenox Hill Hospital

To improve coronary artery runoff during bypass surgery in patients with diffuse coronary disease, a balloon-tipped catheter was used to dilate stenotic "skip" segments. The dilatations were performed through the coronary arteriotomy site used for construction of the bypass graft.

A total of 61 areas, both discrete and diffuse, were dilated in 45 patients (43 men and 2 women) in both the left anterior descending (LAD) and right coronary arteries. Mean age was 58 years (range 42–71). Each patient had additional procedures performed simultaneously.

Early restudy, 8 to 21 days (mean 16), was performed in 21 patients (33 lesions). In 72.7% (24/33), effective dilatation was demonstrated; 18.2% (6/33) were unchanged; and 9.1% (3/33) of the segments containing the dilated lesions were closed. Each of these closed segments were in the proximal LAD.

The late studies (8, 15, and 21 months) demonstrated two widely opened dilated segments and one unchanged but open segment.

Two complications occurred. A perforation occurred in an LAD at the apex during attempted catheter passage. In addition, a normal segment of LAD between two isolated obstructions was ruptured during a sequential dilatation. These were repaired without incident.

These results suggest a role for intraoperative angioplasty to increase the effective runoff of bypass graft flow in selected patients with diffuse coronary disease.

Discussion

Martin J. Kaplitt, M.D., *Great Neck and Queens.* I would like to congratulate Dr. Wallsh on a very interesting presentation. I have had the privilege of participating in multiple phases of direct coronary artery surgery since 1966, including various techniques such as operating on a normothermic beating heart, gas endarterectomy of the right and left coronary artery, cross-clamping of the aorta and operating on the arrested heart under normothermic conditions, operating on the fibrillated heart with the aorta unclamped, and for the last four years operating on the "frozen" heart using cold cardioplegia. I think that Dr. Wallsh is a little modest. I had the opportunity to witness him perform his procedure. His technique was excellent, and it was interesting that after four years of using cardioplegia, I was once again witness to the benefits of operating on the beating heart. The technique was excellent and far easier than I expected it to be. I compliment him on the results.

I think the key thing to be learned from all of this is *versatility.* I believe that depending on the situation, it is really important for the surgeon to be armed with every possible technique as he analyzes the case he is about to do. Whether endarterectomy, vein bypass with endarterectomy, intraluminal dilatation rather than double bypass grafting to an LAD, or the use of intraluminal shunting with a beating heart rather than going to full arrest may be all useful from time to time. I would like to ask one question of Dr. Wallsh: I would be interested to know if there was ever an occasion where flows were measured on a vein graft prior to the dilatation of the distal vessel and then subsequently, after dilation. I mention that as a point of interest for further verification intraoperatively as an improvement as a result of that procedure. Thank you.

Dr. Wallsh: I would like to thank the discussants. I would also like to emphasize that the development of angioplasty has been an ongoing cooperative effort between medical and surgical disciplines.

In response to Dr. Kaplitt's question regarding bypass graft flows both before and after dilatation, we have no experience with this.

I would like to make the point that the major indication at the present time for the intraoperative balloon angioplasty is the presence of an obstructive distal lesion which can be visualized and palpated. Most of these lesions are in the anterior descending coronary artery, from the pulmonary segment distally to the apex. At the present time we are not attempting lesions proximal to the pulmonary artery segment. We are also not performing angioplasties in the right coronary artery. If the obstructions are diffuse we perform an endarterectomy in conjunction with bypass in the right coronary artery.

■

The following article appears in its entirety.

Myocardial Protection With Cold Blood Potassium Cardioplegia During Prolonged Aortic Cross-Clamping

Laboratory evaluation

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Prevention of ischemic myocardial injury during the period of aortic cross-clamping is dependent on maintenance of sufficient energy stores to meet the reduced but undeniable demands of the arrested myocyte. It has been well established that myocardial recovery following cardioplegic arrest is closely related to tissue levels of adenosine triphosphate (ATP) and other high-energy intermediates. In general, the higher the total of high-energy phosphates the greater is the rate and extent of recovery.[1,2] Irreversible myocardial cellular injury may thus occur during a surgical intervention as the result of increased utilization or inadequate replenishment of cellular energy reserves, compromising the outcome of an otherwise successful operative procedure. The ultimate goal of the cardiac surgeon, therefore, remains to provide that an empty, flaccid heart is metabolically sustained for a period long enough to carefully complete any complex cardiac repair.

The effectiveness of cold blood cardioplegia in achieving this goal has been well documented both clinically and through extensive laboratory investigation.[3-8] However, the applicability of this method of myocardial protection beyond two hours of aortic cross-clamp time has not been fully explored. We therefore designed a study to determine the efficacy of cold blood potassium cardioplegia in protecting the myocardium from ischemic damage during a continuous 180-minute period of aortic cross-clamping. Utilizing a combination of biochemical, morphologic, and physiologic studies, we hoped to learn whether the upper limit of cardioplegic arrest could be safely extended beyond that heretofore reported.

Materials and methods

Experimental preparation. Fifteen dogs weighing 25 to 30 kg were anesthetized with morphine sulfate, 2.5 mg/kg, and chloralose, 50 mg/kg. A cuffed endotracheal tube was inserted and respiration was controlled with a positive pressure ventilator supplying room air. A median sternotomy was performed and the heart suspended in a pericardial cradle. Sodium heparin, 3 mg/kg, was administered and total cardiopulmonary bypass was instituted with a disposable bubble oxygenator (Bentley model BOS 10) primed equally with whole fresh homologous blood and balanced electrolyte solution.

The pump oxygenator was supplied with 99% oxygen and 1% carbon dioxide at a rate of 5 L/min. The superior and inferior vena cavae were cannulated, the azygous vein ligated, and all venous return was drained to the oxygenator by gravity drainage. Oxygenator blood was returned to the animal by a roller pump through a cannula inserted into the left femoral artery. A third venous cannula was placed into the right ventricle and a snare placed around the main pulmonary artery. Central aortic pressure was monitored from a polyethylene catheter inserted into the right femoral artery, and systemic temperature was monitored by a rectal thermistor probe. Two 14-gauge plastic catheters were placed into the aortic root. One was connected to an on-line cardioplegia delivery system for aortic root perfusion following cross-clamping (Sarns Inc., Ann Arbor, Michigan), and the second was connected to a transducer for measurement of aortic root pressure (coronary perfusion pressure). Blood samples for coronary venous substrate analysis were obtained from the right ventricular cannula, and coronary perfusate sampling was accomplished through a side arm in the aortic perfusion line. A vent was inserted into the left ventricle, and left atrial pressure was monitored continuously through a polyethylene tube. A thermistor probe was inserted into the middle of the interventricular septum for continuous measurement of myocardial temperature. Arterial blood gases (pO_2, pCO_2, pH) were measured every 30 minutes and the pH was adjusted by the addition of sodium bicarbonate to the venous reservoir. The EKG was monitored continuously using standard limb leads and a V_5 precordial lead. The hematocrit was determined every hour and maintained at greater than 28%. Mean systemic arterial blood pressure was maintained between 60 and 70 mm Hg by altering flow from the pump oxygenator system.

Experimental protocol. Following a 30-minute period of stabilization on bypass, baseline measurements of LV function were obtained by clamping the left ventricular vent and decreasing venous drainage in the bypass circuit to raise left atrial pressure to 15 mm Hg. At this point, −dp/dt, dlogp/dt, left ventricular end diastolic pressure, and left ventricular peak systolic pressure were recorded. Arterial and coronary venous blood samples were taken for determination of oxygen content (the lex-O_2-Con oxygen content analyzer) and lactate concentration according to the method of Henry.[9] Coronary blood flow was determined by snaring the main pulmonary artery and collecting the drainage from the right ventricular vent over one minute. Transmyocardial biopsies of the left ventricular muscle weighing 8 to 10 mg were obtained using a Travenol biopsy needle and immersed in 3% glutaraldehyde for ultrastructural studies, or frozen in liquid nitrogen for subsequent ATP analysis.[10,11]

Experimental groups. Group I, normothermic cardiopulmonary bypass, consisted of six dogs. Following the completion of four hours of cardiopulmonary bypass at 37°C, measurements of ventricular function, metabolic state, and ultrastructural studies were completed as outlined above.

Group II, Multidose cold blood potassium cardioplegia, consisted of nine dogs. Following baseline measurements, systemic cooling to 25°C was carried out. The aorta was cross-clamped and hearts were arrested by infusion of the cold blood cardioplegia solution into the aortic root. The arrest solution utilized consisted of blood from the pump oxygenator system, altered by the addition of potassium to a concentration of 30 mEq/L and buffered to a pH of 8.0 by the addition of THAM.* Initial arrest was achieved by instillation of 1,000 cc of the cold injectate (10°C) at a pressure of 60 to 80 mm Hg. Reinjection of 1,000 was repeated every 30 minutes. Additionally, 500 cc of topical ice lavage with normal saline at 4°C was used to lower myocardial temperature initially and during the period of each reinjection. Transmural ventricular biopsies were obtained at 60, 65, 120, and 180 minutes of arrest for determination of ATP content. Following 180 minutes of continuous arrest, the aorta was unclamped and systemic rewarming to 37°C was carried out. Hearts were defibrillated electrically if a spontaneous rhythm did not develop. Baseline measurements were repeated 30 minutes following reperfusion.

All data are reported as mean ± SEM. Statistical significance was determined using the Wilcoxon ranking test.

Results

Myocardial oxygen consumption (MVO_2). In group I, MVO_2 fell slightly from its initial value of 5.15 ± 0.74 cc/100 g/min to 5.07 ± 1.0 cc/100 g/min following four hours of cardiopulmonary bypass. In group II, MVO_2 also declined from its initial value of 3.83 ± 0.59 cc/100 g/min to 2.78 ± 0.4 cc/100 g/min thirty minutes after reperfusion. In neither case was this change statistically significant ($P > .05$).

Myocardial lactate consumption (MVL). In both groups, there was no significant change noted in myocardial lactate consumption from the beginning to the end of the experimental period ($P > .05$). MVL in group I went from 1.74 ± 0.54 mg/100 g/min to 0.17 ± 1.1 mg/100 g/min following four hours of bypass, while in group II it fell from 1.95 ± 0.65 mg/100 g/min to 0.76 ± 0.7 mg/100 g/min thirty minutes after reperfusion.

Myocardial ATP. The change in myocardial ATP level for both groups of animals is listed in Table I and depicted graphically in Figure 1. It is readily apparent that there is no significant reduction of myocardial ATP level in either group at the end of the experimental period. However, Figure 2, which illustrates the sequential changes in myocardial ATP during the actual period of aortic cross-clamping in group II, highlights one of our most constant experimental findings. It can be seen that the myocardial ATP level actually increases significantly immediately following infusion of the cold blood cardioplegia solution.

Coronary blood flow. Mean coronary blood flow in group I showed a statistically significant ($p < .05$) increase following four hours of cardiopulmonary bypass, rising from 150 ± 24 cc/min to 278 ± 41 cc/min. No such change was noted in group II animals,

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* Tris(hydroxymethyl)aminomethane.

TABLE I. Myocardial ATP Levels (μM ATP/100 mg Protein)*

	Group I		Group II					
				Minutes of AXC				
	Control	After 4 hr Bypass	Control	60	65	120	180	30 min After Reperfusion
ATP	3.912 ± 0.46	3.315 ± 0.51	3.625 ± 0.16	3.479 ± 0.29	4.886 ± 0.19	3.861 ± 0.16	3.08 ± 0.07	3.213 ± 0.27
% Change from control	...	↓15.6 ± 7.52	...	↓5.36 ± 5.1	↑36.69 ± 7.7	↑7.61 ± 5.3	↓10.37 ± 3.6	↓9.0 ± 6.0
P	...	NS	...	NS	<.01	NS	<.01	NS

* All values expressed as mean ± SEM.

TABLE II. Comparison of Myocardial Performance—Four Hours Bypass *v* Three Hours Cross-Clamp*

Group		dlogp/dt(sec^{-1})	$-dp/dt_{max}\left(\frac{mm\ Hg}{sec}\right)$
4 hr bypass alone	baseline	1.120 ± 0.09	1,460 ± 190
	after 4 hr bypass	0.92 ± 0.06	910 ± 130
	% change	↓16.4 ± 6.7	↓36.6 ± 7.9
3 hr cross-clamp blood K^+ cardioplegia	baseline	0.82 ± 0.12	1,270 ± 310
	after 30 min reperfusion	0.67 ± 0.07	730 ± 150
	% change	↓15.0 ± 4.9	↓36.3 ± 8.4

* Values are mean ± SEM; P >.05 all cases.

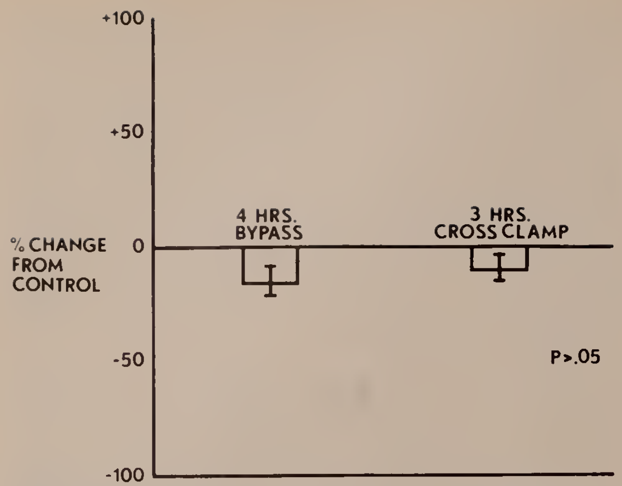

FIGURE 1. Change in myocardial ATP: bypass alone *v* blood cardioplegia

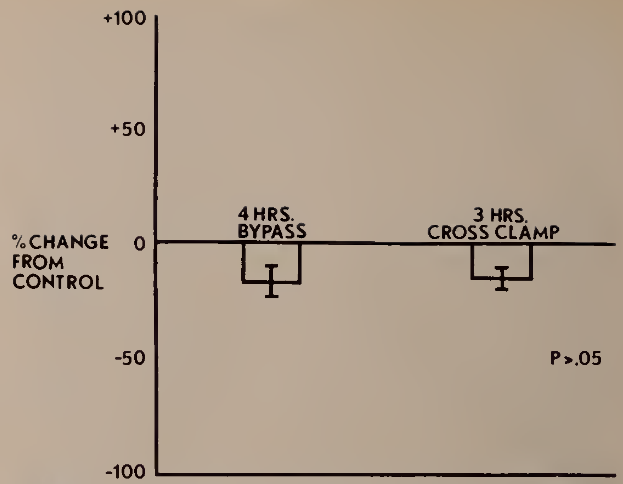

FIGURE 3. Change in left ventricular contractility (dlogp/dt): bypass alone *v* blood cardioplegia.

the mean value going from 211 ± 15 cc/min initially to 210 ± 30 cc/min following thirty minutes of reperfusion ($p > .05$).

Myocardial contractility and rate of relaxation. Table II lists the changes in dlogp/dt and $-dp/dt_{max}$ for both groups of animals at a left atrial pressure of 15 mm Hg. It can be seen that overall myocardial performance following three hours of aortic cross-clamping in the blood cardioplegia group shows no change unattributable to bypass itself. Furthermore, in neither group does myocardial function at the end of the experimental period differ significantly from the baseline value ($P > .05$). These changes are depicted graphically in Figures 3 and 4.

Ultrastructure. Characteristic ultrastructural changes in both groups of dogs are shown in Figure 5. The upper panel shows the baseline myocardial ultrastructure typical of both groups. The mitochondria are clearly defined, and there is no evidence of significant subcellular edema. The mitochondria were noted to be normal in appearance with a dense matrix, parallel crustae, and normal granules. In the middle and lower panels are the ultrastructural changes noted in group II and group I, respectively. Both groups demonstrated mild ultrastructural changes consisting of intracellular and extracellular edema with mild mitochondrial swelling and a minimal decrease in matrix density.

Comment

In 1978, Follette and associates[6] presented both experimental and clinical data which strongly suggested that the use of blood potassium cardioplegia in combination with profound myocardial hypothermia offered excellent preservation of both ventricular function and energy substrate levels for pe-

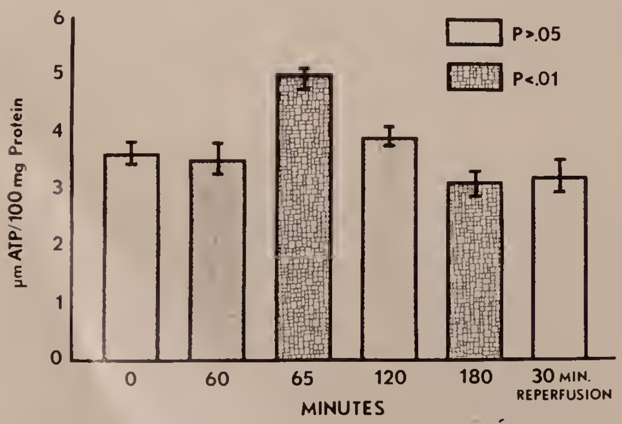

FIGURE 2. Sequential changes in myocardial ATP level during 180 minutes of arrest utilizing blood potassium cardioplegia. Note statistically significant rise in ATP at 65 minutes immediately following injection of cold blood cardioplegia solution.

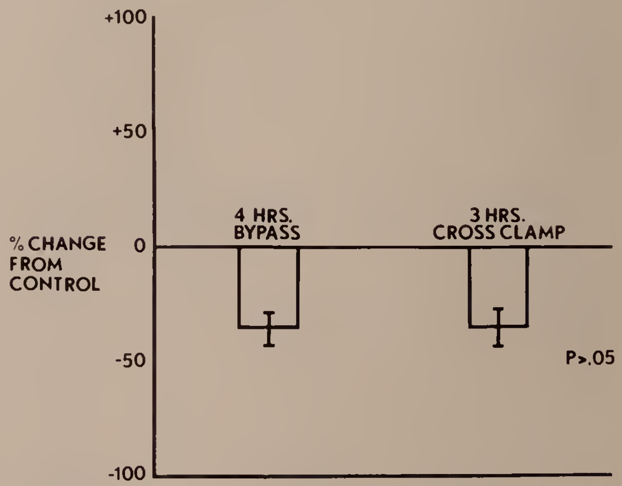

FIGURE 4. Change in myocardial relaxation rate ($-dp/dt_{max}$): bypass alone *v* blood cardioplegia.

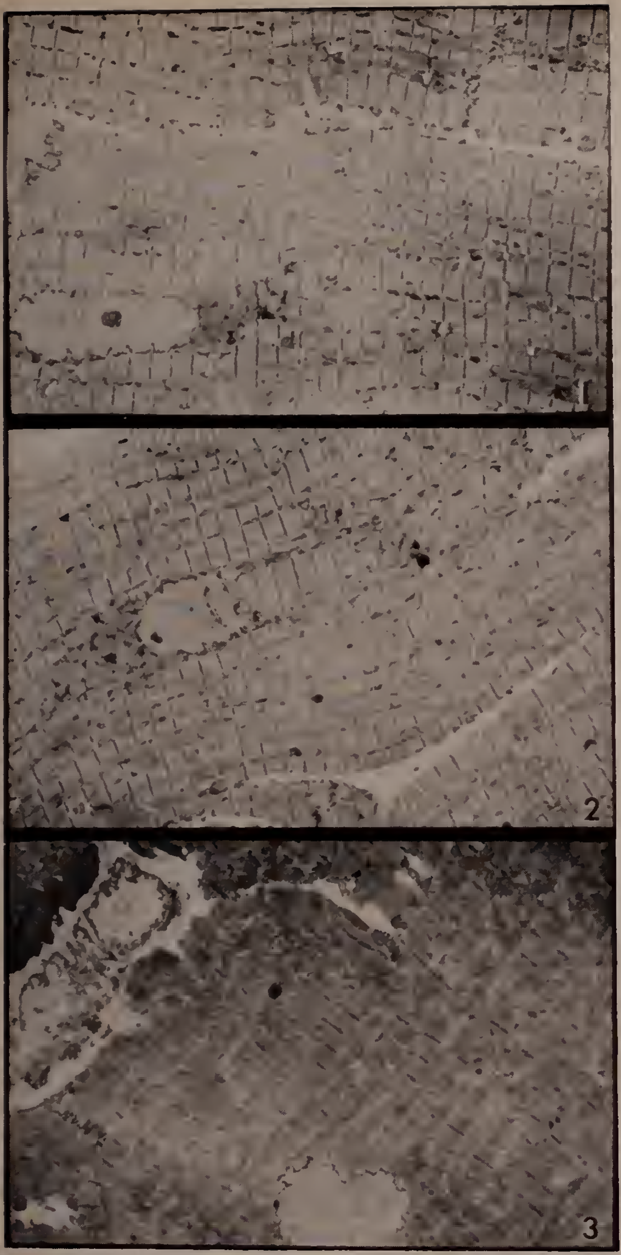

FIGURE 5. Myocardial ultrastructural appearance after four hours of cardiopulmonary bypass alone *v* three hours of blood potassium cardioplegia. (1) control; (2) 30 minutes after reperfusion following 3 hours of blood potassium cardioplegia; (3) following four hours of bypass alone.

riods of two hours of aortic cross-clamping. Further studies attesting to the efficacy of this technique have since appeared from numerous institutions.[3–7] However, in no case has the applicability of the blood potassium cardioplegia technique been investigated in a well-controlled experimental study beyond 120 minutes of aortic cross-clamping.

The present study utilized a combination of morphologic, biochemical, and physiologic measurements to assess the effectiveness of blood potassium cardioplegia. Our findings have confirmed that cold blood potassium cardioplegia is an effective means of myocardial protection during prolonged (180 min) aortic cross-clamping.

The addition of blood to an arrest solution not only must provide some substrate but in addition should carry enough oxygen to repay the minimal oxygen debt incurred between frequent reinjections. Previously reported values for oxygen consumption in the normal, beating, nonworking heart range from 3.7 to 5.2 cc/100 g/min,[12–14] a finding well in agreement with that of this study. Furthermore, since MVO_2 was not significantly altered following three hours of arrest in the blood potassium cardioplegia group, this probably reflects the fact that these hearts were presented with adequate levels of oxygen to meet their reduced but ongoing metabolic demands. Additionally, at some point the arrested myocardium will need substrate as its energy stores are being continuously metabolized. Drake et al[15] have previously demonstrated that in the normal dog lactate is the preferred myocardial substrate. Their conclusion rested on the finding that over 85% of the total substrate oxidized in their experiments was radioactively labeled C^{14}-lactate. They found that lactate uptake by the myocardium was directly related to the metabolic rate (MVO_2) which in turn was accompanied by parallel changes in myocardial blood flow. Maintenance of a normal lactate consumption pattern following arrest with blood potassium cardioplegia has been documented previously[18] and was reconfirmed in this study. The failure of MVO_2 to increase following reperfusion has raised the question by some investigators that perhaps oxygen delivery to the myocardium has been impaired.[16] We have, however, interpreted the findings of normal oxygen and lactate consumption levels in the absence of a measurable hyperemic response to indicate the rapid return of normal metabolic function following arrest with cold blood potassium cardioplegia.

Many investigators have demonstrated a high correlation between myocardial high energy phosphate levels at the end of arrest and subsequent myocardial performance. Lowe et al[17] have reported that cell death first occurs in the canine heart when depletion of ATP exceeds 65%. They found that alterations in cell volume regulation, ion distribution, and ultrastructure were reversible if more than 35% of ATP was preserved. In this series of animals, there also appeared to be a parallel between the maintenance of normal myocardial ultrastructure, ventricular function, and preservation of high energy phosphate. Changes in ATP, therefore, are probably sensitive indicators of protection and help to define the facility with which the myocyte can resume normal function. The presence of normal ATP levels after blood cardioplegia reflects the fact that the myocardium was quickly arrested in a well-oxygenated state with normal energy stores. Maintenance of these stores depends thereafter on adequate presentation of oxygen and substrate to the arrested myocardial cell to satisfy its ongoing demands.

With proper application of the blood potassium cardioplegia technique, we feel that the safe upper limit of cross-clamp time will be significantly increased.

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Discussion

William A. Gay, Jr., M.D., *New York City.* I enjoyed the presentation very much. In the early 1960s, a cardiac surgeon based in Los Angeles proclaimed to us that the best way to protect the heart during cardiac operations was to use continuous perfusion of oxygenated blood throughout the period of aortic cross-clamping. That particular surgeon, like the investigators at New York University, has currently turned to championing the cause of blood cardioplegia with results that are very difficult to argue with. I have several questions about tonight's presentation, however. If my arithmetic is correct, the volume of blood cardioplegia solution infused into these 25-kg dogs totalled approximately 6 L per animal. That's in a 20- to 25-kg dog. If you inject 1,000 cc initially and then another 1,000 cc five more times that's about 6 L. Translated to a 75-kg human, if you upgrade that, that's going to amount to 18 liters of cardioplegia solution. I don't think that that is a practical volume to rely on especially if you are going to mix it back into the pump prime.

Secondly, despite numerous attempts over the last 20 or 25 years by cell biologists around the world, I am not aware that anybody has ever conclusively demonstrated that supplying a cell with an excess of substrate and oxygen has resulted in the ability of the cell to stockpile ATP. I think the fact that ATP might increase after a period of aortic cross-clamping probably means that the cell was not basal and well-nourished to start off with, and may indeed be better nourished after an infusion of oxygenated blood, rather than assuming it's normal and then after it is cross-clamped it's supernormal.

The group at Stanford as well as other places around the country have elected to use a nonblood agent for long-term preservation of hearts aimed at orthotopic transplantation, and here we are talking about periods in excess of four hours. These hearts have been taken out at one city, put on an airplane and flown to another city and put into another human being. Experimentally, hearts have been successfully preserved in a mason jar using nonblood preservation techniques for periods in excess of 24 hours, then orthotopically transplanted successfully, which is probably the ultimate test of myocardial function. I wonder if this group has attempted long-term, meaning 24 hours or more, preservation with blood cardioplegia techniques.

While I think I can agree with most of the conclusions drawn by the essayist tonight I don't think that blood cardioplegia is the only way to get there.

Dr. Catinella: I would like to thank Dr. Gay for his interesting and stimulating discussion. The cardioplegia delivery system that we utilized is one which we helped to develop for the Sarns Company, which should be commercially available in the near future. This on-line system utilizes blood drawn from the pump oxygenator and volumetrically combines it with a premixed electrolyte solution in a ratio of nine parts blood to one part drug. A separate heat exchanger is employed to deliver the cardioplegic infusate at any desired temperature. Use of this system allowed accurate regulation of infusate potassium concentration, pH, injection pressure, and flow rate.

Although 6 L of cardioplegia solution does seem like an excessive amount for a small dog to receive over three hours, we were most concerned with maintaining myocardial temperature at less than 15°C during the time interval between injections. We found that cooling the heart to between 8° and 10°C by routine injection of 1,000 cc of cardioplegia every 30 minutes allowed us to easily achieve this goal. Serum potassium was periodically determined throughout the experiment and if it approached 6 mEq/L, between 50 and 100 mg of furosemide was administered intravenously, allowing urinary excretion of the excess potassium. Parenthetically, I would like to add that this volume of cardioplegia is not used clinically at our institution, and I would in no way recommend it.

I agree with Dr. Gay that it would be interesting to see data from long-term studies evaluating the effectiveness of various cardioplegia techniques, and we have made plans for embarking upon such studies in the near future. I hope that next year I will be able to come back and present to you the results of those experiments.

As regards the preservation of excised hearts for transplantation, I think the major difference between a heart that has been excised and stored in saline versus one that has been arrested in situ relates to the fact that there is continual washout of the cardioplegia solution by noncoronary collateral flow in the latter. This situation does not hold for a heart that has been excised and preserved, and it underscores the importance of reperfusion at least every 30 minutes with cardioplegia solution, and meticulous attention to the details of the cardioplegia technique.

Regarding the synthesis of ATP in an arrested myocardium, Fleckenstein's group, in the late 1950s, was able to show that the arrested heart will incorporate radioactively labeled inorganic phosphate into ATP, and it will do so at a rate that exceeds that shown by skeletal muscle. The synthesis of ATP immediately following injection of the blood potassium cardioplegia solution has been a consistent experimental finding in our laboratory, and has also been shown to occur clinically in a paper presented by Dr. Cunningham at the AATS meeting in Boston several years ago. We have also noted in a different series of experiments that ATP levels following the injection of crystalloid cardioplegia solution were actually decreased significantly over the entire cross-clamp interval. It is for these reasons we have chosen to adopt blood potassium cardioplegia as our method of myocardial protection clinically, and I feel certain that future studies will continue to support the merit of this technique. Thank you. ■

The following article appears in its entirety.

Chest Wall Reconstruction Using a Latissimus Dorsi Myocutaneous Flap

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Surgery and radiation are the main therapeutic methods available for treatment of breast cancer, the most common malignant condition affecting women in this country.[1] Radiation-induced dermatitis, necrosis, or subsequent ulcer formation are frequent complications following therapeutic radiation. Occasionally, recurrent cancer of the chest wall is present in the area of radiation dermatitis or ulceration.

We report five cases of full-thickness and one case of partial-thickness resection of the chest wall and one-stage chest wall reconstruction with a latissimus dorsi myocutaneous flap for radiation ulcer in post-mastectomy patients, recurrent carcinoma following mastectomy, or primary skin malignancy.

Surgical anatomy

The latissimus dorsi muscle is a broad, flat, fan-shaped muscle originating from the lower six thoracic vertebrae, lumbar and sacral vertebrae, and posterior iliac crest. It inserts into the posterior bicipital groove of the humerus as a well-defined quadrilateral tendon in close association with the teres major muscle. The undersurface of the muscle is in close relation with the teres major and the serratus anterior muscle laterally, and with paraspinous musculature posteriorly.

There are two primary sources of blood supply to the latissimus dorsi muscle. The dominant supply is via the subscapular artery with the terminal thoracodorsal artery extension, which originates from the lateral third of the axillary artery. The thoracodorsal artery gives off one or two branches to the serratus anterior muscle before entering the anterior and the superior margin of the muscle. Within the muscle, the vessel continues longitudinally, running parallel to the anterior edge of the muscle and giving off numerous branches posteriorly. Small musculocutaneous perforators supply the overlying skin, allowing the elevation of the flap as a myocutaneous unit. The cutaneous portion can be extended several centimeters beyond the anterior edge of the muscle, below the iliac crest, across the midline posteriorly.

Therefore, a flap with tremendous size potential can be elevated, depending on the need.

The minor blood supply is from the paraspinous perforating vessels from the dorsal branches of the posterior intercostal artery of the seven lowest intercostal spaces and the dorsal branches of the four lumbar arteries, allowing creation of a "reverse" latissimus dorsi flap.[2] The latissimus dorsi acts as an adductor and a medial rotator, and its loss is not noticed in normal activities because of numerous substitute muscles.

Preoperative consideration

Preoperative axillary angiography is usually not necessary since the thoracodorsal vessel is preserved in the vast majority of patients who have undergone a radical mastectomy. However, even in documented absence of the vessel, significant collateral vessels from the serratus anterior, teres major muscle, as well as from small axillary and intercostal vessels, enter the axillary portion of the latissimus dorsi and will support the flap.[3]

The functioning latissimus dorsi muscle should be checked preoperatively by palpating and visualizing the contracting muscle by having the patient push down and inward with patient's hands on the iliac crest. If the muscle is missing, in most likelihood the nerve has been transected with the great possibility of an associated thoracodorsal vessel transection. The surgery can still be performed, however, with the realization that the muscle will be thin and atrophic, providing less bulk, and that axillary dissection should be minimal to preserve the collateral vessels. The preoperative markings are done preferably in the standing position, and the design of the skin ellipse is determined by eventual size, shape, and location of the defect. It can be oriented either in a transverse or an oblique fashion to make the donor site scars cosmetically more acceptable.

Surgical technique

The patient is positioned in a slight lateral decubitus position with arms prepared and draped free. The resection of the chest wall is first carried out by the thoracic surgeon removing a generous margin of the tissue from the edge of the ulcer, and resection usually involves the full thickness of the chest wall including underlying ribs and pleura. The pleural layer is usually reconstructed with insertion of Marlex mesh.[4–6] Then the skin island is incised according to the previous marking down to the latissimus dorsi muscle. A skin flap is elevated superiorly, inferiorly, and anterolaterally, and the free superior and anterior margins of the muscle identified.

The vascular pedicle need not be identified in most of the cases. However, initial identification will make the subsequent dissection of the flap easier. The vascular pedicle can be easily identified in a loose areola tissue plane in the space between the subscapularis, latissimus, and serratus anterior muscles. The thoracodorsal artery with the two accompanying vena comitantes and thoracodorsal nerve constitute an easily detectable 6- to 10-cm long neurovascular pedicle before its penetration into the muscle. To obtain a longer reach of the flap medially in the anterior chest, the muscle insertion into the humerus is detached and the circumflex scapulae and serratus branches are ligated. Great care should be exercised not to separate island skin from the underlying muscle by placing multiple sutures between the skin and the muscle layer. The flap is transferred through the subcutaneous tunnel between the defect and the donor site, leaving the skin bridge intact with a space large enough to accommodate the muscle and the vascular pedicle comfortably without strangulation or kinking. The donor site is usually closed primarily by wide undermining of the surrounding skin. However, the split-thickness skin graft is sometimes required when an exceptionally large flap has been elevated.

Case reports

Case 1. A 67-year-old white woman underwent a radical mastectomy in 1968 and received postoperative radiation to the mastectomy area, right axilla, neck, and sternum area. The patient developed an ulceration on the apex of the axilla in 1979. A biopsy of the lesion was described as calcified material; however, the ulcer failed to heal.

In August 1979 resection of the chest wall, leaving the surgical defect measuring 12 × 3 cm, and of the underlying rib and pleura was performed. The defect was closed in single stage with transfer of the right latissimus dorsi myocutaneous flap, and the donor site was closed primarily.

Case 2. (Fig 1) A 56-year-old white woman underwent a right modified-radical mastectomy in 1975, and then underwent a localized resection of the chest wall for local chest wall recurrence in March 1979 followed by 5,000 rads of radiation and chemotherapy. The patient developed a 2-cm firm, fixed, tender mass on the vertical scar on the medial anterior chest.

In February 1980, a full-thickness resection of the chest wall, including three underlying ribs and the pleural layer, was performed resulting in the defect measuring 15 × 15 cm. The chest wall was reconstructed with Marlex mesh and a right latissimus dorsi myocutaneous flap, and the donor site was closed with a split-thickness skin graft.

Case 3. A 73-year-old black woman underwent a left mastectomy four years ago, followed by a radiation and chemotherapy. Subsequently the patient developed a massive local recurrence of the breast cancer.

In May 1978, a through-and-through resection of the chest wall was performed. The defect, measuring 14 × 12 cm, was reconstructed with Marlex mesh and transfer of a left latissimus dorsi myocutaneous flap. Primary closure of the donor site was performed.

Case 4. (Fig 2). A 59-year-old white woman underwent a radical mastectomy in 1962, followed by postoper-

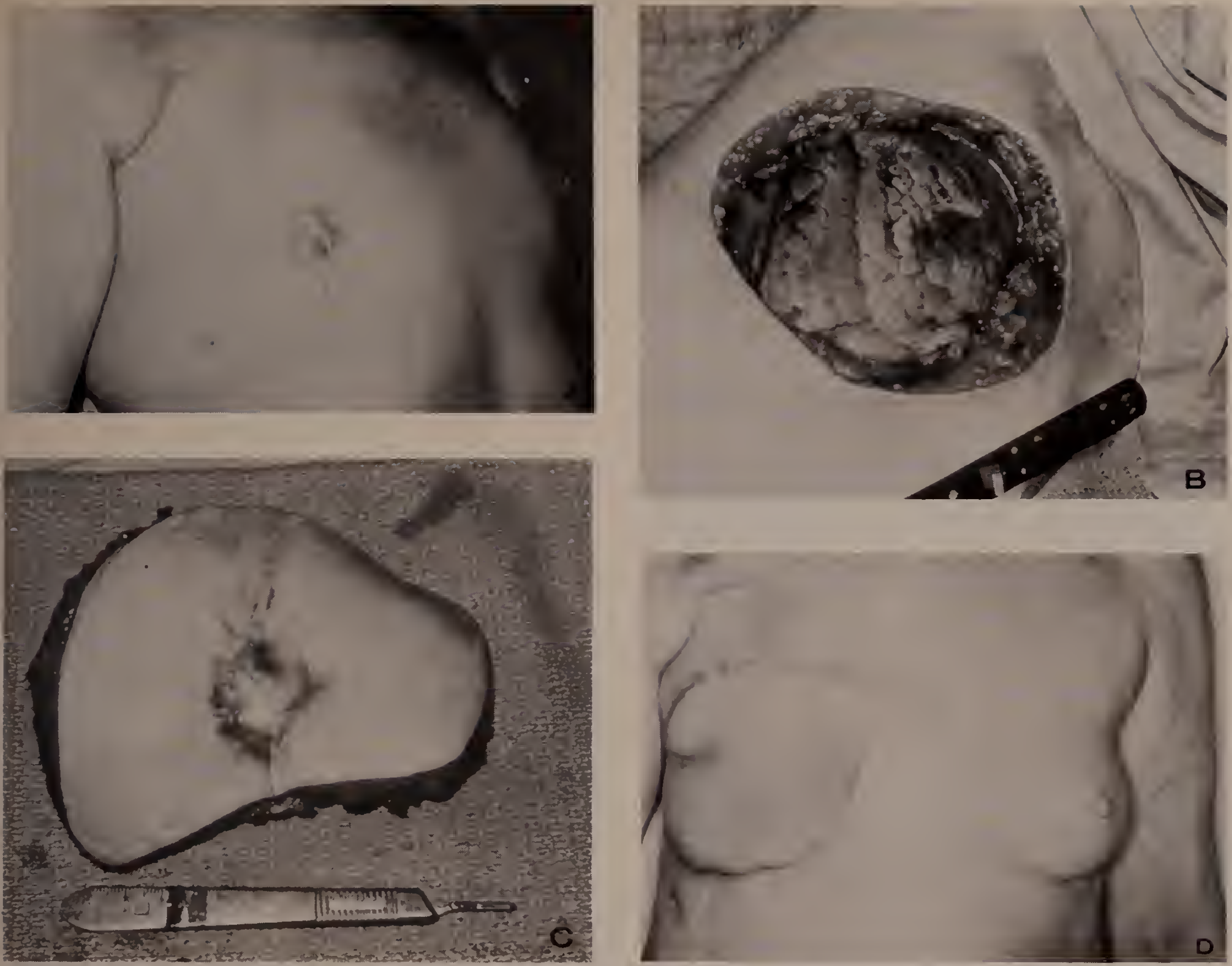

FIGURE 1. Case 2. (A) Preoperative photograph showing recurrent tumor on mastectomy scar of right anterior chest. (B) Through-and-through defect on chest wall following surgical resection. (C) Surgical specimen following full-thickness resection including ribs and pleura of right anterior chest wall. (D) Postoperative photograph showing completely healed flap.

ative radiation and chemotherapy. The patient also developed massive lymphedema of the right arm postoperatively. In 1980, she developed an ulcer on the right anterior chest wall which became worse, exposing the underlying ribs. Examination revealed a 3 × 3 cm ulceration with the underlying necrotic ribs, with severe radiation dermatitis of the surrounding skin.

In September 1980 the patient underwent a radical resection of the chest wall, including four underlying ribs and a portion of the lung adherent to the anterior chest wall. The surgical defect, measuring 12 × 13 cm, was closed with the right latissimus dorsi myocutaneous flap, and the donor site was closed primarily.

Case 5. A 66-year-old white woman underwent a modified-radical mastectomy in 1962, followed by postoperative radiation. The patient noticed a recurrence of the skin lesion in 1976 followed by formation of the ulcer, which failed to heal. The ulcer was adherent to the underlying ribs.

In July 1980 the patient underwent a radical resection of the left anterior chest wall and reconstruction using a left latissimus dorsi myocutaneous flap, and the donor site was closed primarily.

Case 6. A 66-year-old white man had a lesion on the left anterior chest wall that had been neclected for many years. The lesion measured about 15 × 15 cm in diameter. The initial biopsy of the lesion showed a basal cell carcinoma.

In May 1980 the patient underwent a radical resection of the chest wall including pectoralis major and minor muscles down to the rib cage. The surgical defect measured about 20 × 20 cm and was reconstructed with a left latissimus dorsi myocutaneous flap. The donor site was closed with a split-thickness skin graft.

Comment

Ulcer of the chest wall, due either to radiation necrosis following breast cancer or to recurrent carcinoma on the chest wall, has been a difficult therapeutic challenge to the reconstructive surgeons for

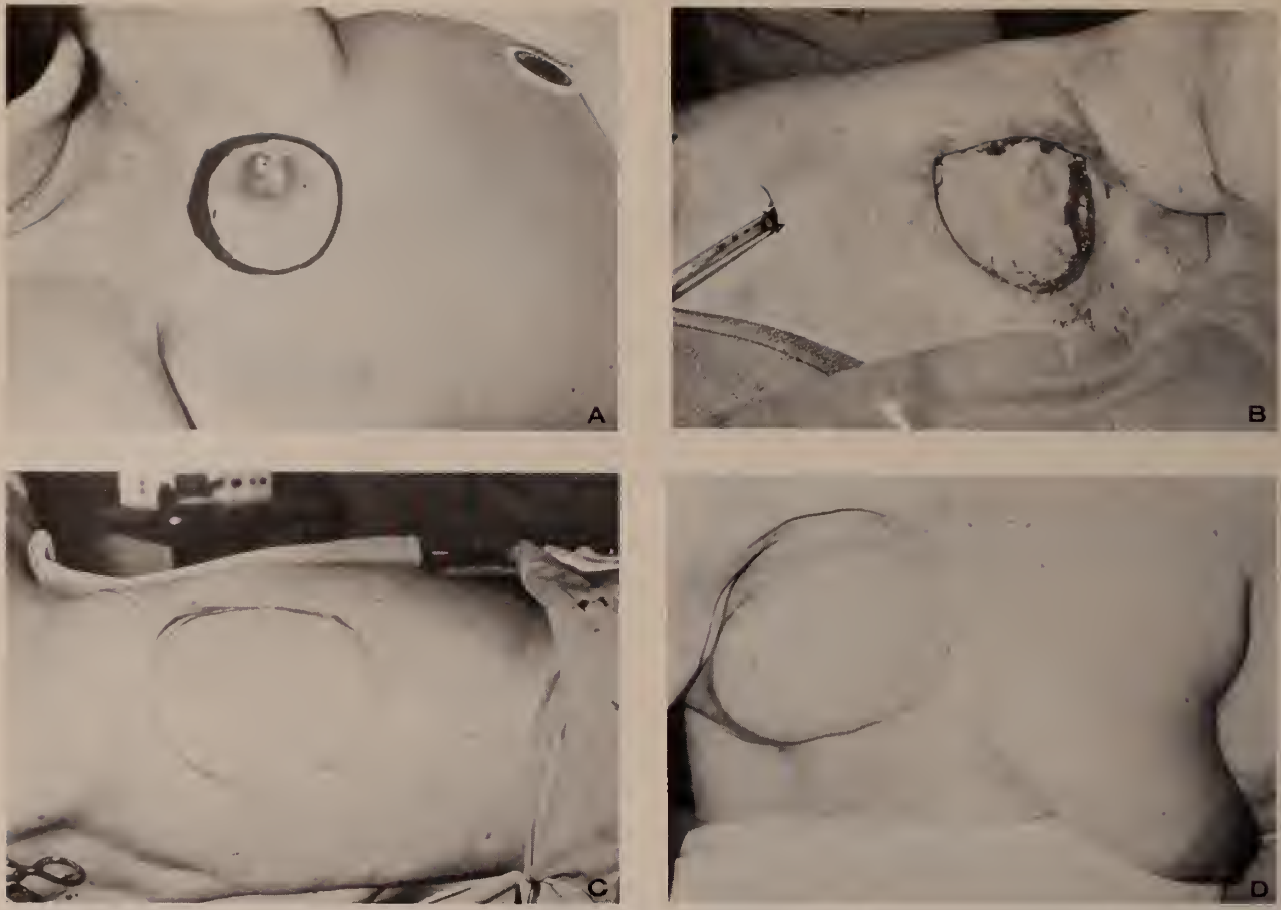

FIGURE 2. Case 4. (A) Preoperative photograph showing ulcer on right anterior chest wall. (B) Defect of chest wall following through-and through resection. Marlex mesh is shown covering defect. (C) Right latissimus dorsi myocutaneous flap outlined on right posterolateral chest. (D) Postoperative photograph showing well-healed flap on right anterior chest wall.

many years. The reconstructive challenge varied according to the size, depth, and etiology of the defect.[7] A simple split-thickness skin graft is usually not satisfactory even in a partial-thickness defect because of the severe radiation damage of the tissue with poor vascularity of the host bed and also because of exposure of the costal cartilages or ribs.[8–10] Such a defect usually requires a composite flap tissue with its own blood supply to these ischemic areas for successful reconstruction.

Historically, flaps of many kinds have been utilized with varying results. These include various local flaps, the classic thoracicoabdominal tube flap, the transverse thoracicoepigastric flap[11] based either medially or laterally, rotation of the remaining breast,[12–14] or use of omentum with split-thickness skin graft.[15–17] The tube pedicle requires numerous stages for completion and is seldom used today. The thoracicoepigastric flap is basically a random flap which requires multiple delay procedures for successful execution. The breast flap leaves considerable residual deformity of the chest creating a "cyclops" breast and carries a considerable risk of subsequent carcinoma in the remaining breast. The greater omentum flap requires a laparotomy with its potential abdominal complications and omentum may be too small, adherent to the bowel, or may result in incomplete take of the skin graft.

Considering the difficulties associated with the above procedures, the fear of not being able to reconstruct the chest wall prevented the surgeon from performing adequate resection of chest wall lesions. The latissimus dorsi myocutaneous flap, originally described by Tansini at the turn of the century,[18] has been rediscovered in the last few years[19,20] and has become one of the most reliable and versatile flaps for the reconstruction of the breast following mastectomy,[21,22] for head and neck reconstruction,[23,24] or for other areas,[25,26] and as a donor flap for the free microvascular composite tissue transfer into various parts of the body.[27]

For chest wall reconstruction, the latissimus dorsi myocutaneous flap offers many advantages such as reliability with predictable blood supply, great size potential, exceptional range of arc of rotation, luxury of a single-stage reconstruction without delay, no appreciable functional deficit following extirpation of the muscle, and relatively minimal donor site deformity since the donor site is usually closed primarily.

Conclusion

The six cases of successful one-stage chest wall reconstruction using latissimus dorsi myocutaneous flap have been described. This reliable versatile flap made reconstruction of this difficult area possible in a single stage with virtually no limitation of the size of the defect and consequently allows the chest surgeon to pursue an aggressive approach without fear of inability to do reconstruction, and will certainly result in a better chance of cure or appreciable palliation.

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■

Discussion

Edward J. Beattie Jr., M.D., *New York City.* The problem with the reconstruction of a radical mastectomy is loss of the pectoral muscles. In the olden days skin tubes were advanced and all kinds of methods were tried to reconstruct the breast. Now, with this much-improved technique, one can safely cover major defects in the chest in one stage. At the same time one can fill in the infraclavicular defect on a radical mastectomy and subsequently reconstruct the breast with an implanted prosthesis. I have one question. We try to keep the incision on the back in the brassiere strap line. We do this so that scars are not seen on a woman wearing a brassiere. In some of these patients, I note the incisions were vertical across the brassiere line. Why were they done that way?

We certainly agree this is a very good technique.

Dr. Lee: I agree with Dr. Beattie. In my personal medical practice the latissimus dorsi myocutaneous flap is used mostly for a postmastectomy reconstruction of breasts when skin is deficient and tight and will not allow insertion of an implant. You mentioned that transverse incision is to be made in the area where it can be easily hidden under the bra. I agree with you. If you take a small amount of tissue, then, by all means, incision should be made in certain ways to conceal the scar as much as possible. However, in the case where a large amount of cutaneous unit is elevated, as described in my presentation, it would be impossible to confine the donor site scar in a concealed area. Thank you for your attention.

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CONTRAINDICATIONS

Propranolol hydrochloride is contraindicated in 1) bronchial asthma, 2) allergic rhinitis during the pollen season; 3) sinus bradycardia and greater than first degree block; 4) cardiogenic shock; 5) right ventricular failure secondary to pulmonary hypertension; 6) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol; 7) in patients on adrenergic-augmenting psychotropic drugs (including MAO inhibitors), and during the two week withdrawal period from such drugs

WARNINGS

CARDIAC FAILURE. Sympathetic stimulation is a vital component supporting circulatory function in congestive heart failure, and inhibition with beta blockade always carries the potential hazard of further depressing myocardial contractility and precipitating cardiac failure. Propranolol acts selectively without abolishing the inotropic action of digitalis on the heart muscle (i e., that of supporting the strength of myocardial contractions) In patients already receiving digitalis, the positive inotropic action of digitalis may be reduced by propranolol's negative inotropic effect. The effects of propranolol and digitalis are additive in depressing AV conduction.

IN PATIENTS WITHOUT A HISTORY OF CARDIAC FAILURE, continued depression of the myocardium over a period of time can, in some cases, lead to cardiac failure In rare instances, this has been observed during propranolol therapy Therefore, at the first sign or symptom of impending cardiac failure, patients should be fully digitalized and/or given a diuretic, and the response observed closely: a) if cardiac failure continues, despite adequate digitalization and diuretic therapy, propranolol therapy should be immediately withdrawn; b) if tachyarrhythmia is being controlled, patients should be maintained on combined therapy and the patient closely followed until threat of cardiac failure is over

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following *abrupt* discontinuation of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease, who are given propranolol for other indications

IN PATIENTS WITH THYROTOXICOSIS, possible deleterious effects from long-term use have not been adequately appraised Special consideration should be given to propranolol's potential for aggravating congestive heart failure. Propranolol may mask the clinical signs of developing or continuing hyperthyroidism or complications and give a false impression of improvement Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. This is another reason for withdrawing propranolol slowly Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

IN PATIENTS UNDERGOING MAJOR SURGERY, beta blockade impairs the ability of the heart to respond to reflex stimuli. For this reason, with the exception of pheochromocytoma, propranolol should be withdrawn 48 hours prior to surgery at which time all chemical and physiologic effects are gone according to available evidence. However, in case of emergency surgery, since propranolol is a competitive inhibitor of beta-receptor agonists, its effects can be reversed by administration of such agents, e.g., isoproterenol or levarterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in restarting and maintaining the heart beat has also been reported

IN PATIENTS PRONE TO NONALLERGIC BRONCHOSPASM (*e.g* , CHRONIC BRONCHITIS, EMPHYSEMA), propranolol should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETICS AND PATIENTS SUBJECT TO HYPOGLYCEMIA: Because of its beta-adrenergic blocking activity, propranolol may prevent the appearance of premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia. This is especially important to keep in mind in patients with labile diabetes. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

USE IN PREGNANCY: The safe use of propranolol in human pregnancy has not been established Use of any drug in pregnancy or women of childbearing potential requires that the possible risk to mother and/or fetus be weighed against the expected therapeutic benefit. Embryotoxic effects have been seen in animal studies at doses about 10 times the maximum recommended human dose

PRECAUTIONS

Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if propranolol is administered. The added catecholamine-blocking action of this drug may then produce an excessive reduction of the resting sympathetic nervous activity Occasionally, the pharmacologic activity of propranolol may produce hypotension and/or marked bradycardia resulting in vertigo, syncopal attacks, or orthostatic hypotension.

As with any new drug given over prolonged periods, laboratory parameters should be observed at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function

ADVERSE REACTIONS

Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; arterial insufficiency, usually of the Raynaud type, thrombocytopenic purpura. *Central Nervous System:* lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. *Gastrointestinal:* nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis. *Allergic:* pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress *Respiratory:* bronchospasm. *Hematologic:* agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura. *Miscellaneous:* reversible alopecia Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been conclusively associated with propranolol *Clinical Laboratory Test Findings.* Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

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Brief Summary of Prescribing Information.

Indications and Usage: Management of anxiety disorders or short-term relief of symptoms of anxiety or anxiety associated with depressive symptoms. Anxiety or tension associated with stress of everyday life usually does not require treatment with an anxiolytic.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

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DOSAGE: Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.

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"My friend Arturo had been having back pains, which he suspected had come from lifting boxes on the job. The chiropractor he consulted said it was 'multiple subluxations,' and certified that this was a workers' compensation injury requiring a prolonged course of therapy.

For a while Arturo seemed to be getting better, but then the treatments didn't seem to work anymore. He was having trouble walking, and there were leg pains now. The chiropractor had recommended increasing to daily manipulations, but Arturo's neighbor suggested acupuncture.

So my friend tried acupuncture. His family urged that he see a real doctor, but for some reason Arturo was reluctant and went ahead with the prescribed therapy. After months of smoking needles and herb tea, Arturo was walking with a cane. He could barely get around and was having urinary problems. When I saw him he looked quite guant, so we dragged him to his family's physician who made the diagnosis within the hour: prostatic carcinoma with spinal invasion and peripheral metastases.

The rest of the story was grim but mercifully short. During one hospital visit, we gently wondered why Arturo had delayed so long: 'The chiropractor insisted that he was a "state licensed doctor" and that I was the most typical case of worker's back strain he had seen; he said that multiple subluxations just take years to respond. The acupuncturist told me that in the Orient they don't need tests for diagnosis because the treatment will work against any disease.'

After Arturo died, I was angry that he had lost a precious year in expensive and unpleasant treatments, while being dissuaded from seeking proper care until it was too late: "There ought to be a law!" Now, I'm less angry but more sad: this could happen in 1982 to an intelligent person of means. And I sigh, and shrug, and wonder where the real fault lies."

—JM Corboy, M.D.
Hawaii Medical Journal 1982; 41:461

The House Staff Council at the Charleston Area Medical Center (CAMS) organized a multidisciplinary conference that was titled "Medical Pearls." Along with subjects and observations directly related to day-to-day practice were reviews of new technology and thinking. The presentations were set-up largely for senior medical students and residents.

The pearls included advice that can be considered good old-fashioned "horse sense." Among them were affability, along with ability and availability, in professional relationships with patients; developing the art of listening to patients words, as well as 'between the lines' of their words. One physician emphasized that "the family can either be your worst enemy or your greatest friend," both in encouraging patient compliance and (along with nurses,

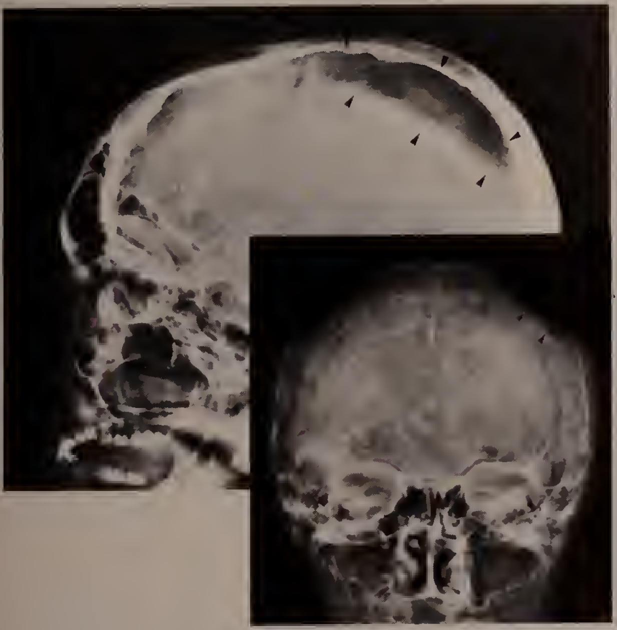
(*continued on page 738*)

Radiologic Problem of the Month

Montefiore Hospital and Medical Center
The Bronx, New York

Editor
KAKARLA SUBBARAO, M.D.
Professor of Radiology at
Albert Einstein College of Medicine

Symmetrical Depression of Skull



A 71-year-old asymptomatic man was brought for investigation by his wife who had noticed a progressive depression of his head.

Elucidation

Anteroposterior and lateral views of skull reveal bilateral and symmetrical lucent defects in the parietal bones in the parasagittal location (Fig). The inner table is intact while the outer table is almost collapsed, with absence of diploë. Since the patient is asymptomatic and since this process is progressive according to the history, the radiologic appearance should suggest the diagnosis of bilateral thinning of parietal bones, encountered in old age.

Idiopathic localized thinning of calvaria involving the occipital, frontal, temporal, and parietal bones is encountered occasionally. Bilateral and symmetrical thinning of parietal bones is more common than thinning of the remainder of bones of the calvaria. It is more frequent in women, with a sex ratio of 1:1.9.[1,2] This is a slowly progressive process of middle-aged and elderly patients and is not an anatomic variant or bony dysplasia. This thinning should not be confused with the developmental anomaly of "holes in the parietal bones," which is more often encountered in childhood but which persists throughout life. This appearance should not be mistaken for metastases or myeloma.

Thin parietal bones is an entity known since the 18th century. Many synonyms have been used for this abnormality such as *involutionskrankheit*, malum senile biparietale, senile atrophy, biparietal thinness, and biparietal osteodystrophy.[1,2] Thin parietal bones of the skull have been described in Egyptian mummies and in a female cranium recovered from Harappa, India, which is the type site of the Indus civilization belonging to the Bronze Age cultures and dated 2300 BC.[3] Greig described the first radiological findings in 1926 and distinguished this appearance from congenital parietal foramina.[4] Two types of parietal thinning are described, the grooved and the flat, and the former may merge into the latter.[1]

Many theories have been advanced to explain the etiology of the thinning of parietal bones. Baldness, syphilis, trauma to the skull in childhood, senility, menopause, vascular changes, mental disorders, wearing of heavy wigs—all these have been incriminated but no substantial proof exists to bear out the proper etiology. However, it is postulated that progressive thinning of the parietal bones is due to decreased osteoblastic activity resulting from a combination of physiologic factors which include hormonal insufficiency, senility, and other causes of involutional osteoporosis in an area where there is little stress or strain.

In the differential diagnosis, several possibilities are included, eg, metastases, myeloma, osteolytic Paget's disease (areas of osteoporosis circumscripta), brown tumors of hyperparathyroidism, infections, and inflammatory granulomatous disorders, but the bilateral and symmetrical appearance generally rules out these entities. No adjacent soft-tissue changes are present. Hence, basal cell carcinoma, sebaceous, epidermoid, and dermoid cysts extrinsically involving the bone by infiltration or pressure erosion should not enter into differential diagnosis.

Diagnosis

Bilateral and symmetrical involutional parietal thinning

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(continued from page 736)

secretaries, and others) in observing the patient outside the confines of the examining room or office.

Pearls such as these may be considered old hat. Good rapport is never old hat. It was, and remains, the cornerstone of the physician-patient relationship.

**(Editorial, *The West Virginia Medical Journal*)
1983; 79:14.**

. . . from the newstand.

During liberalism's palmy days, special-interest groups that contributed money and "in-kind services" (ie, letter-lickers, doorrappers) to political candidates were well-regarded. Outfits like COPE — the political arm of the AFL-CIO — were a healthy counterbalance, so the argument ran, to Big Business, which everybody knew skewed elections. But things have changed. Now the correct liberal note is an alarmed cry to clamp down on political action committees (PACs). That's because conservatives found out how to use them.

Of the $182 million spent by PACs in the last election, conservative groups expended the largest amounts. North Carolina Sen. Jesse Helms' Congressional Club spent $9.6 million; the National Conservative Political Action Committee, $9 million; the Fund for a Conservative Majority, $2.5 million. The fattest wad a liberal group could ante up was $2.2 million, from the National Committee for an Effective Congress. Now, suddenly, many liberals — Walter Mondale and Gary Hart prominent among them — want to rid America of the PAC menace.

The chief minute-rice argument against PACs is Democratic Sen. William Proxmire's: "PAC money is not free; it has strings attached." But they are only the flimsy strings of expectation, and they are plainly visible: Every PAC contribution is a matter of public record. This helps weaken the shadowy system whereby full-time lobbyists court congressmen in ways that never show up in black and white. Also, if the PAC for cobras raises $1,000 to help reelect Sen. Fang, the mongoose PAC is perfectly free to raise $1,000 (or more) for his opponent. At core, democracy is a ceaseless clash of competing interests, and PACs are simply one variation of this wholesome tumult.

Not everyone believes that politicians are evolution's crowning glory, but it is wicked to suggest that many of them are streetwalkers who need only be asked "how much." PAC critics tend to confuse cause and effect. Sen. Orrin Hatch of Utah receives campaign contributions from pro-life groups because

(continued on page 756)

BRIEF SUMMARY
PROCARDIA® CAPSULES For Oral Use
(nifedipine)

INDICATIONS AND USAGE: I. Vasospastic Angina: PROCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria: 1) classical pattern of angina at rest accompanied by ST segment elevation, 2) angina or coronary artery spasm provoked by ergonovine, or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography, the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PROCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e.g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm, or when angina is refractory to nitrates and/or adequate doses of beta blockers.

II. Chronic Stable Angina (Classical Effort-Associated Angina): PROCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or organic nitrates or who cannot tolerate those agents.

In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in those patients are incomplete.

Controlled studies in small numbers of patients suggest concomitant use of PROCARDIA and beta blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs. (See Warnings.)

CONTRAINDICATIONS: Known hypersensitivity reaction to PROCARDIA.

WARNINGS: Excessive Hypotension: Although in most patients, the hypotensive effect of PROCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension. These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers.

Severe hypotension and/or increased fluid volume requirements have been reported in patients receiving PROCARDIA together with a beta blocking agent who underwent coronary artery bypass surgery using high dose fentanyl anesthesia. The interaction with high dose fentanyl appears to be due to the combination of PROCARDIA and a beta blocker, but the possibility that it may occur with PROCARDIA alone, with low doses of fentanyl, in other surgical procedures, or with other narcotic analgesics cannot be ruled out.

Increased Angina: Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PROCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Beta Blocker Withdrawal: Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines. Initiation of PROCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PROCARDIA initiation. It is important to taper beta blockers if possible, rather than stopping them abruptly before beginning PROCARDIA

Congestive Heart Failure: Rarely, patients, usually receiving a beta blocker, have developed heart failure after beginning PROCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event.

PRECAUTIONS: General: Hypotension: Because PROCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PROCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. (See Warnings.)

Peripheral edema: Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PROCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy. With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Drug Interactions: Beta-adrenergic blocking agents: (See Indications and Warnings.) Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PROCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina.

Long-acting nitrates: PROCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Digitalis: Administration of PROCARDIA with digoxin increased digoxin levels in nine of twelve normal volunteers The average increase was 45%. Another investigator found no increase in digoxin levels in thirteen patients with coronary artery disease. In an uncontrolled study of over two hundred patients with congestive heart failure during which digoxin blood levels were not measured, digitalis toxicity was not observed. Since there have been isolated reports of patients with elevated digoxin levels, it is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing PROCARDIA to avoid possible over- or under-digitalization.

Carcinogenesis, mutagenesis, impairment of fertility: When given to rats prior to mating, nifedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose.

Pregnancy: Category C. Please see full prescribing information with reference to teratogenicity in rats, embryotoxicity in rats, mice and rabbits, and abnormalities in monkeys.

ADVERSE REACTIONS: The most common adverse events include dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%. Syncopal episodes did not recur with reduction in the dose of PROCARDIA or concomitant antianginal medication. Additionally, the following have been reported. muscle cramps, nervousness, dyspnea, nasal and chest congestion, diarrhea, constipation, inflammation, joint stiffness, shakiness, sleep disturbances, blurred vision, difficulties in balance, dermatitis, pruritus, urticaria, fever, sweating, chills, and sexual difficulties. Very rarely, introduction of PROCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related. Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

Laboratory Tests: Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CPK, LDH, SGOT, and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nifedipine therapy The relationship to PROCARDIA therapy is uncertain. These laboratory abnormalities have rarely been associated with clinical symptoms. Cholestasis, possibly due to PROCARDIA therapy, has been reported twice in the extensive world literature.

HOW SUPPLIED: Each orange, soft gelatin PROCARDIA CAPSULE contains 10 mg of nifedipine. PROCARDIA CAPSULES are supplied in bottles of 100 (NDC 0069-2600-66), 300 (NDC 0069-2600-72), and unit dose (10x10) (NDC 0069-2600-41). The capsules should be protected from light and moisture and stored at controlled room temperature 59° to 77°F (15° to 25°C) in the manufacturer's original container.

More detailed professional information available on request.

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PROCARDIA®
(NIFEDIPINE) *Capsules 10 mg*

Please see PROCARDIA *brief summary on adjoining page.*

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*Procardia is indicated for the management of:
1) Confirmed vasospastic angina.
2) Angina where the clinical presentation suggests a possible vasospastic component.
3) Chronic stable angina without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or nitrates or who cannot tolerate these agents. In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks' duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in these patients are incomplete.

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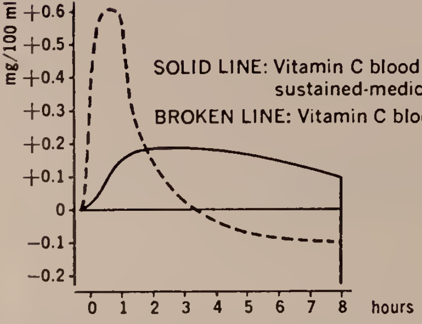

*Comparison of ascorbic acid blood levels after administration of 1 gram of ascorbic acid in effervescent tablet form and 1 gram of CEVI-BID (2 capsules). *Adaptation

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Chronic Radiation Dermatitis From Radioactive Gold Jewelry

L. WILLIAM LURIA, M.D.*
H. BERMAN, D.D.S., M.D.
S. SATCHIDANAND, M.D.
Buffalo, New York

From the Buffalo General Hospital

In recent months three patients have been treated for chronic radiation dermatitis of the hands. The lesions in all three patients were located in areas that had been in contact with gold jewelry. None of the patients had any known history of repeated low-dose exposure to ionizing radiation. The etiology of the dermatitis became apparent with the public disclosure that radioactive gold (Au 198) had contaminated the local gold supply. Two of the three patients had had their gold jewelry tested and the pieces were found to be radioactive. Radioactive gold jewelry was first reported as a possible source of radiation dermatitis by Simon and Harley in 1967.[1] Presumably the patients' jewelry had been fashioned from gold used in cancer therapy in Western New York and in Metropolitan New York.

At the present time, the problem appears to be primarily localized to the state of New York. However, the population of the United States is quite mobile and physicians throughout the country should be made aware of the potential for problems in their respective areas.

The three patients with lesions located on their ring fingers were treated with wide surgical excision of the clinically involved areas of the skin and reconstruction of the involved excised areas with full-thickness skin grafts.

Clinical material

The patients, ages 47, 65, and 66, purchased the incriminated jewelry in the Western New York area between 1936 and 1947. The jewelry was worn for periods of time ranging from fifteen months to eighteen years. All three patients discontinued wearing their jewelry (rings), after noticing skin changes which included dryness of the skin, cracking, and bleeding. Two patients consulted their family physicians who told them that the reactions were probably fungal or allergic in nature, and they were treated conservatively. All three patients had their lesions biopsied, and the diagnosis of chronic radiation dermatitis was established. One patient's biopsy was performed in 1966; the other two patients' lesions were biopsied in February and March of 1981. None of the three patients had any known history of (repeated) exposure to low-dose ionizing radiation. One of the three patients, due to the suspicious relationship of the lesion to his gold ring, had the ring tested at the University of Buffalo Nuclear Center in 1966. The ring was found to be radioactive. A second patient had her ring tested for radioactivity following the public disclosure that radioactive gold had contaminated the local gold supply, and this ring was also found to be radioactive. The third patient who only wore the incriminated piece of jewelry for 15 months, removing it in 1941, could not locate the ring for testing.

Signs and symptoms

Chronic radiation dermatitis appears in its early stages as thin dry skin which appears smooth, shiny, and hairless. The area may also be itchy and hyperemic.[1] This atrophic skin may be the first sign of incipient disease. As time progresses, the lesion may become telangiectatic, containing thrombosed vessels which lead to the formation of "coal spots."[2] The lesion then may progress into a wart-like keratosis, which then ulcerates, and ultimately evolves into a carcinoma. Chronic radiation dermatitis may be mistaken for senile changes secondary to actinic damage. Varying degrees of hyper- and hypopigmentation can be associated with the telangiectasis and should alert the physician to the possibility of chronic radiation dermatitis especially when localized to skin which was or still is in contact with a piece of gold jewelry. The chronic form of radiation dermatitis also can be easily distinguished from the shorter more aggressive course of acute radiation dermatitis. The chronic form which occurs after repeated doses of radiation at "suberythemal" levels may not become evident for many years.[3]

The acute form of radiation dermatitis, on the other hand, occurs rapidly within minutes after a single dose which exceeds 300 to 800 rads.[4] It first appears as a transient inflammatory reaction accompanied by itching, pain, and blistering which may disappear only to reappear and then progress into edema of the skin followed by an exudative reaction. The acute form of the dermatitis then develops into a hyperpigmented area days to weeks following the exposure and can remain in a hyperpigmented state for several years.[2,5]

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In addition to the lesions described above, pain and itching may be associated with both chronic and acute forms of this dermatitis. Areas of chronic radiation dermatitis are also more susceptible to mild trauma which may lead to ulceration. Some of these forms of trauma include friction, pressure, excessive exposure to solar radiation, and herpes simplex infections. The formation of an ulcer may be a sign of malignant degeneration and should be treated accordingly.[2,4,5]

Treatment

The treatment of chronic radiation dermatitis is based on the clinical stage at which the diagnosis is established. Several authors advise conservative therapy for early lesions, ie, those that show the atrophic changes. They recommend oil emulsion application to dry skin, avoidance of further exposure to radiation, and minimizing trauma to the area. In some circumstances they even advocate the use of topical corticosteroids.[2] However, authors such as Brown and his coauthors[6] recommend that "excision and repair be done when the area is in relatively good condition" and not waiting for the later stages of the dermatitis to occur. They maintain that the "power of recovery" of the irradiated tissues "seem to be slight or nil" due to the continued effect of the radiation despite the removal of the source.[6] Therefore, if the patient lives long enough, he will eventually develop ulceration and run the risk of malignant transformation,[7] this process being dependent on the total dose of radiation and a number of other factors.

It has now been well established that a positive relationship exists between radiation damage and carcinoma of the skin, with an induction period of anywhere from 10 to 30 years.[6] It is on this basis that Brown and his coauthors advised an early wide surgical excision of skin lesions, especially those with keratosis and the presence of "coal spots." They maintain that while many patients' lesions in this stage progress slowly there are those which may become rapidly malignant.[3] There also has been a report of a malignancy occurring in clinically normal-looking skin.[6,8]

All patients in our group underwent wide excision of the clinically involved skin. A 2-mm margin was maintained around all lesions excised with full-thickness skin graft reconstruction performed. The groin area was used as a donor site in two of the three patients. The choice of a full-thickness skin graft was based on the location of the lesions which involved both volar and dorsal skin of the irradiated digits. No healing complications were encountered in any of the patients treated.

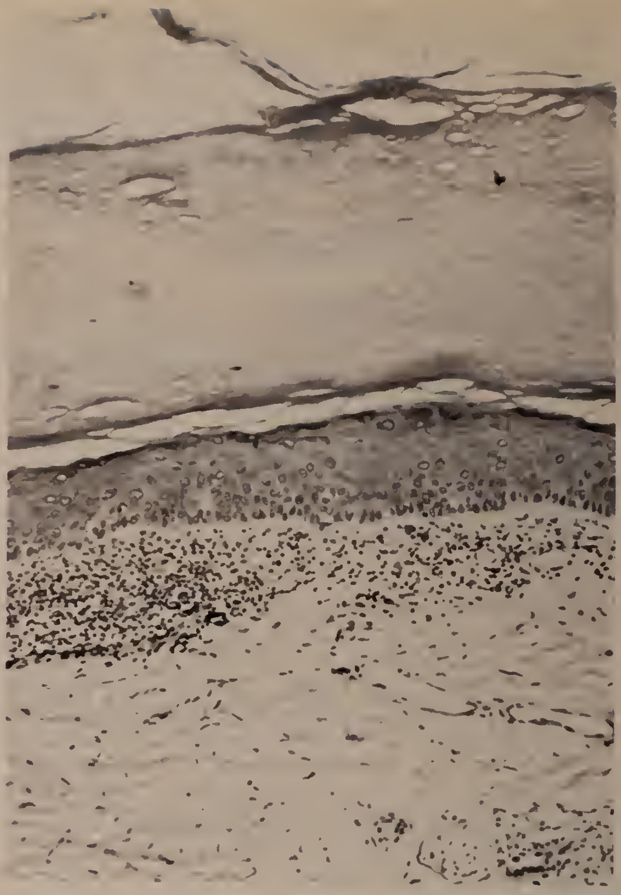

FIGURE 1. Skin showing hyperkeratosis, atrophy of epidermis, dermal scarring, loss of adnexal structures, and band-like infiltrate of lymphocytes in dermis (original magnification ×115).

Pathogenesis

Chronic radiation dermatitis is the result of repeated "suberythermal" doses of ionizing radiation. The atrophy of the skin that is seen in the early stage of the condition includes the following "essential pathologic processes": (1) loss of skin appendages, especially hair follicles and sebaceous glands with marked injury to the sweat glands; (2) replacement of normal subcutaneous tissue by dense collagen containing large amounts of hyaline and elastin fibers (Fig 1); (3) proliferation of the subendothelial connective tissue of the small vessels which culminates in obstruction of these vessels; (4) dilation of capillaries resulting in telangiectasis; and (5) necrosis of portions of the corneum beneath the epidermis causing a reparative proliferation in those portions of the epidermis.[2,3,6] These areas act as a stimulus for vertical proliferation of the epidermis (Fig 2), leading first to areas of keratosis and subsequently over a period of years to the malignant properties that can ultimately develop.[3]

Chronic radiation dermatitis can be differentiated from actinicity-induced atrophy by the pattern of damage to the skin appendages and the presence of the aforementioned dense collagen. The clinical

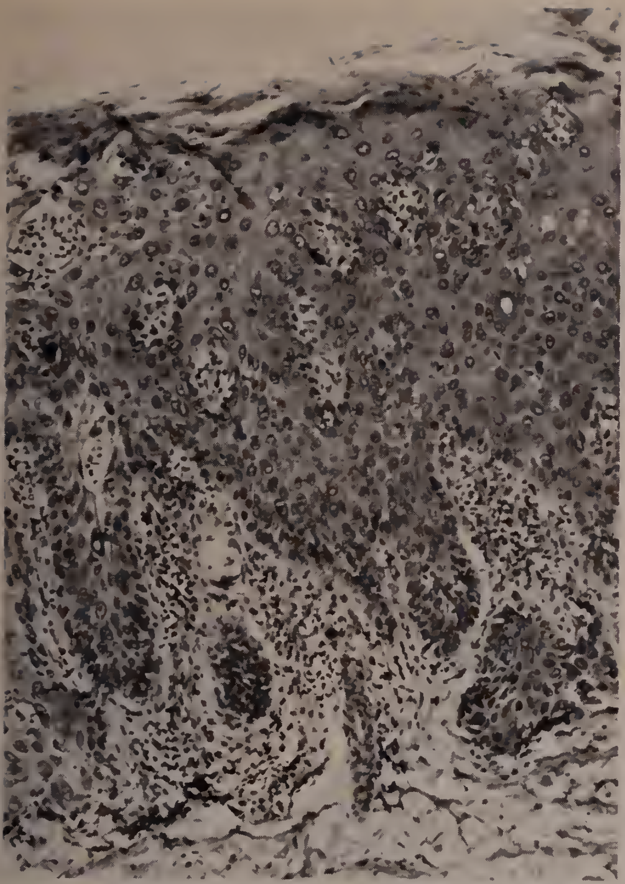

FIGURE 2. Hypertrophy of epidermis with parakeratosis and mild atypia of epithelial cells, especially in basal layer (original magnification ×230).

stages of chronic radiation dermatitis progress at different rates in individual patients depending on the nature and duration of exposure. Malignant changes have been noted as early as three years following exposure, but usually occur in 20 to 25 years. The most frequently seen malignant lesion is squanous cell carcinoma. Occasionally basal cell carcinoma or basal squamous cell carcinomas has been found.[3]

Comment

Radioactive gold (Au 198) is prepared by neutron irradiation of stable gold (Au 197) in a nuclear reactor. Its half-life is 2.7 days and it decays to stable mercury (Hg 198). Radioactive gold gives off both beta and gamma rays. It has been used for both therapy and diagnosis of cancer. Malignancies that have been treated with ^{198}Au include prostatic and ovarian carcinoma, malignant pleural effusion, as well as a number of other malignant conditions.[1,7] Some of this ^{198}Au used for implantation therapy seems to have entered into general circulation and has been found in gold jewelry, eating utensils, and watches.

We have now treated three cases of chronic radiation dermatitis of the hand. In two of these three patients, the incriminated jewelry was tested and found to be radioactive. The other patient discarded his ring after 15 months of wear and it was not available for testing. In the past, this condition was most frequently encountered on the hands of physicians who had been chronically exposed to fluoroscopy and occasionally on the fingers of dentists burned while holding x-ray films in patients' mouths.[3]

Chronic radiation dermatitis is a clinical entity that is not new. It should be considered as a possible diagnosis in any patient fitting the above mentioned clinical picture. In these cases, the suspected jewelry should be tested for radioactivity. If for some reason the incriminated jewelry cannot be tested and the lesion does not respond to conservative care, the suspicious lesion should be excised for pathologic examination. The physician should be aware of the potential for these lesions to undergo malignant degeneration and it is for this reason that we recommend a wide excision with full-thickness skin graft reconstruction and close follow-up care.

Summary

We have treated three patients who had chronic radiation dermatitis secondary to prolonged contact with radioactive gold jewelry. In all three cases, the diagnosis was established by histopathology. There was no history of chronic radiation exposure in any of the patients. All lesions were associated with gold jewelry and in two cases, the suspected gold was found to be radioactive. With the recent disclosure that radioactive gold used in cancer therapy had contaminated the local gold supply, this unexpected etiology now has been given more public attention.

We recommend that all suspicious lesions associated with gold jewelry be examined carefully and that an excision biopsy be strongly considered if the suspected gold jewelry is not available for testing. On confirming a diagnosis of chronic radiation dermatitis, our treatment of choice has been wide excision and full-thickness skin graft reconstruction.

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Temple Terrace, Florida 33617
(DR. LURIA)

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THE MULTIVITAMIN/MINERAL FORMULATION

Fatal *Hemophilus influenzae* Meningitis Complicated by Diabetes Insipidus

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Hemophilus influenzae meningitis is an uncommon infection in adults. We presently report on a 25-year-old man with fatal *Hemophilus influenzae* meningitis complicated by diabetes insipidus.

Case report

A 25-year-old previously healthy man was rushed unconscious to the emergency ward. His past history was unremarkable. Twelve hours prior to admission he complained of excruciating headache and vomited several times; his body temperature was 37.8°C. On admission he was in deep coma, with Cheyne-Stokes respiration, anisocoria, and papilledema. The blood pressure was 200/100 mm Hg, the pulse rate 104/minute and the rectal temperature 39.6°C. The white blood cell count was 26,000/cu mm, glucose 138 mg/dL, potassium 3.9 mEq/L, sodium 140 mEq/L, and chloride 108 mEq/L. The serum proteins were normal. Because of the papilledema, a lumbar puncture was not performed.

The presumptive diagnosis of fulminant meningitis was raised and treatment with crystalline penicillin, 60 million units/day and chloramphenicol 6 g/day was immediately started. The EEG showed a flat tracing, and a CT brain scan demonstrated marked brain edema. Two hours later the blood pressure dropped to 80/40 mm Hg and the pulse rate rose to 130/minute. The urinary output during the following 15 hours was 17 L, replaced by intravenously administered isotonic saline and glucose, as well as 5 units of vasopressin tannate given intramuscularly. The urinary sodium was 15 mEq/L, the potassium 26 mEq/L, and the chloride 20 mEq/L. The urine osmolarity was 167 mosm/kg and the blood osmolarity 331 mosm/kg. During the period of the marked diuresis, the serum potassium was 2.9 mEq/L, the sodium 156 mEq/L, and the chloride 130 mEq/L. The total white blood cell count raised to 38,700/cu mm with 33% band forms, 65% polymorphonuclear leukocytes, 1% monocytes, and 1% lymphocytes. Following the above mentioned treatment, the diuresis was reduced to 80 mL/hour, the urinary osmolarity was 410 mosm/kg, and the blood osmolarity was 276 mosm/kg.

In spite of massive antibiotic treatment and extensive resuscitative efforts, the patient expired 32 hours after his admission. The postmortem examination revealed severe brain edema and purulent meningitis, and *Hemophilus influenzae* type B was cultured from the CSF. There were neither macroscopic nor microscopic abnormalities in the pituitary gland or along its stalk. The blood cultures were sterile.

Comment

H. influenzae meningitis is considered an uncommon disease in adults,[1,2] although this view was recently questioned.[1] This infection was reported among patients with diabetes mellitus, agammaglobulinemia, otitis, and sinusitis, and following cranial injury, surgery, and splenectomy.[3] However, as in our case, a predisposing cause was not always found. The presently observed fulminant and subsequently fatal course remains unexplained since even in the preantibiotic era, the majority of adults afflicted with this infection remained alive.[1,4,5]

Another outstanding finding was the diabetes insipidus, which is rarely reported in association with meningitis due to tuberculosis,[6] streptococci,[7] *Listeria monocytogenes*,[8] or pneumococci[9] and was described once in a child with *H. influenzae* meningitis.[10] To the best of our knowledge, this complication was not previously recorded in an adult afflicted with this infection.

Damage to the superficially located supraopticohypophyseal tract or tension and irritation to the pituitary stalk[10] were the suggested explanation for this complication. This explanation seems plausible since in the absence of any detectable microscopic lesion, it is possible that the tension exerted by the increased intracranial pressure on the hypophyseal stalk is responsible for the appearance of the diabetes insipidus.

Summary

H. influenzae meningitis proved fatal in a 25-year-old man. It was accompanied by diabetes insipidus, a complication not reported previously in adults with this rare type of meningitis. Tension and irritation of the pituitary stalk were probably responsible for this complication.

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Calcified Leiomyoma

An unusual cause of large soft-tissue calcification of calf in childhood

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A large, tender, heavily calcified mass in the calf, just below the popliteal fossa of a 6½-year-old boy, proved to be a leiomyoma. Such a mass has not been previously reported, except in the axilla.

Case report

A 6½-year-old boy was examined because of pain and swelling behind his left knee for several weeks. A hard, slightly tender mass was palpated behind the tibia just below the popliteal fossa. No fever or other abnormalities were noted. Radiographic examination of the mass showed a large cluster of calcification in a "mulberry" configuration (Fig 1). A smooth, undulating thick stripe of calcification was seen to surround these calcifications, suggesting a capsule. The mass was adjacent to but separate from the tibia. Radiographic skeletal survey showed no other lesions. Computerized tomography showed similar findings (Fig 2). Arteriography showed the mass to be predominantly avascular with a few abnormal vessels identified (Fig 3). Radionuclide examination demonstrated considerable uptake in the region corresponding to the calcified mass but appearing to merge with epiphyseal uptake.

At surgery the mass was well delineated and well encapsulated. It was quite closely adherent to the periosteum of the posterior, proximal shaft of the tibia, lying deep to the medial belly of the gastrocnemius muscle, which had been stretched and attenuated because of the large mass. The area was not particularly vascular. It was necessary to actu-

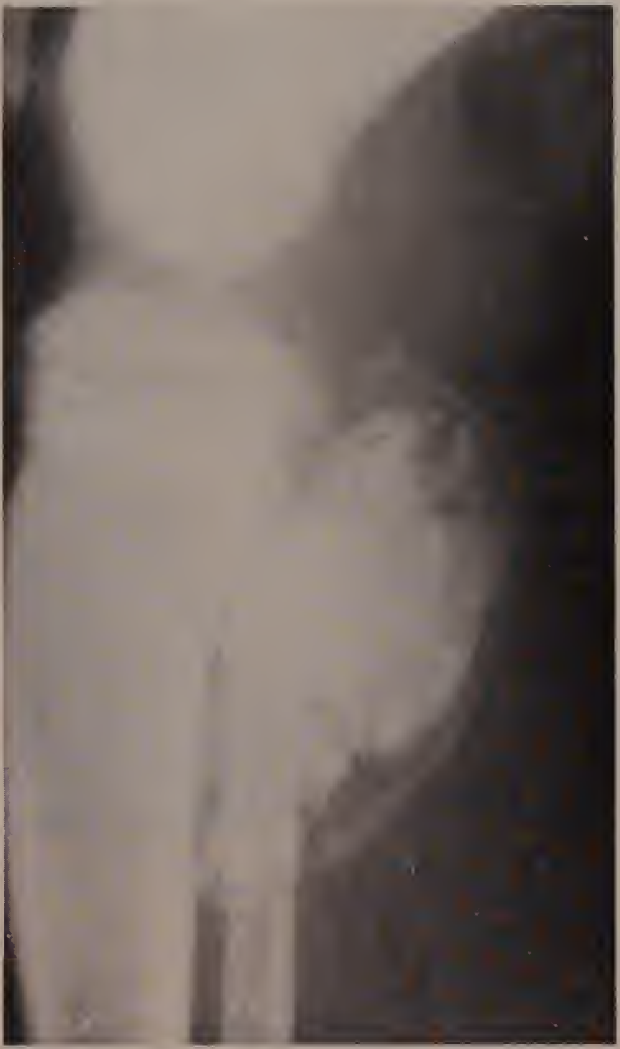

FIGURE 1. Large cluster of calcium behind tibia is similar in configuration to that seen in uterine leiomyomas. It is surrounded by calcific band resembling a capsule.

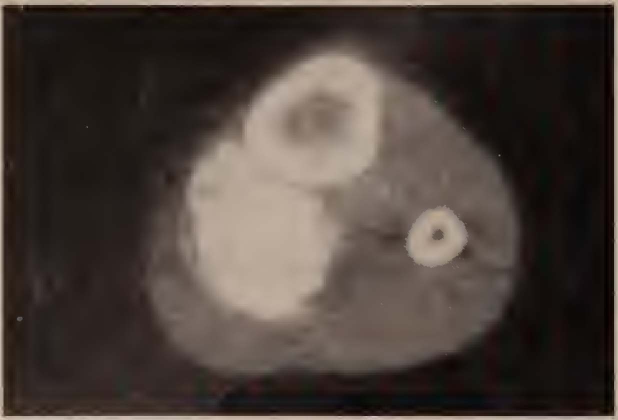

FIGURE 2. Computed tomography scan. Although adjacent to tibia, calcium is shown to be separate from it on all CT sections.

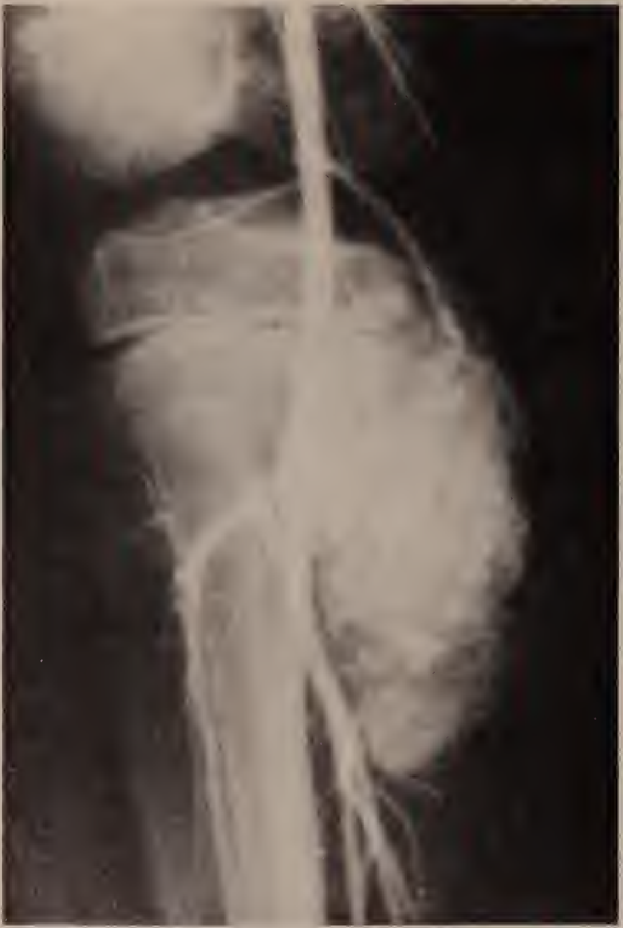

FIGURE 3. Arteriogram shows no significant abnormal vasculature. Nodular configuration of calcium is well demonstrated.

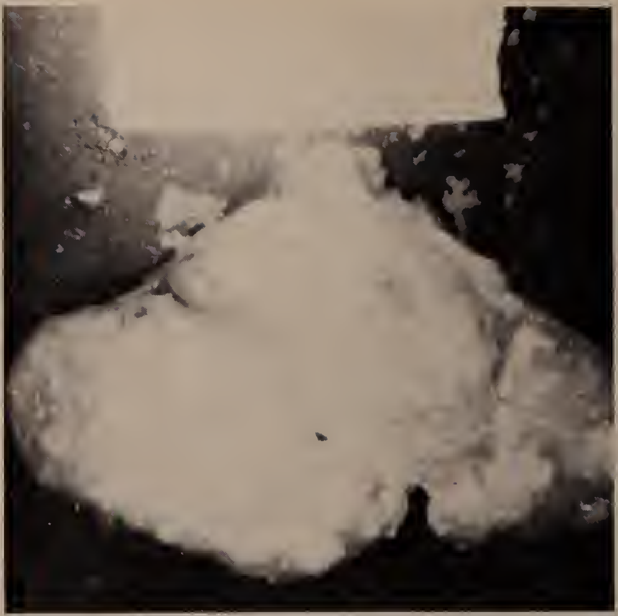

FIGURE 4. Cut section of tumor. Note extensive calcification (light areas).

ally mobilize the proximal origin of the medial belly of the gastrocnemius from its attachment in the distal femur to afford better exposure of the mass. The soleus was also attenuated in a similar fashion under the medial head of the gastrocnemius and it too was mobilized in a similar fashion. After laterally retracting and protecting the neurovascular bundle in the distal popliteal space, the lesion was separated by blunt dissection from the adjacent soft tissues and was excised completely. The postoperative course was uneventful.

The patient then had very good recovery of function. Contours of the calf musculature returned quite rapidly over the next few months. Follow-up x-ray film five months postoperatively showed no residual calcifications in the area.

The tumor measured up to 7.0 cm in greatest dimension. It was well circumscribed and had a gritty sensation on bisection. The cut section had areas of whitish-yellow discoloration which on palpation appeared to contain foci of calcification (Fig 4).

Microscopic examination revealed spindle-shaped cells arranged in fascicles with cigar-shaped nuclei and fibrillary protoplasmic cytoplasm, characteristic of a leiomyoma. No significant mitotic activity was noted. Although the tumor did not have a fibrous or calcified capsule, the unusual calcific pattern at the periphery simulated a capsule on the radiographs. The calcification in other areas was random and not related to necrosis or hemorrhage. Because of the unusual location and radiologic presentation, the slides were also reviewed at the Armed Forces Institute of Pathology where the diagnosis was confirmed.

Comment

Ledesma-Medina et al,[1] in a recent review of leiomyomas in children, observed that subcutaneous and deep leiomyomas, in contrast to uterine leiomyomas, rarely contain calcium. Reviewing the literature, they tabulated six out of 12 reported cases in the lower limb. In the two cases they reported, both were axillary, and both had large collections of calcification similar to that seen in uterine leiomyomas. Caffey's[2] sole reference to leiomyoma had been an illustration of an axillary lesion almost identical to these two cases of Ledesma-Medina et al. Caffey indicated that this was a microscopic diagnosis and implied a relationship to tumoral calcinosis.

Differential diagnosis of this type of calcification would appear limited in that the calcification is parosteal[3] and does not resemble benign or malignant lesions of the chondroid or osseous series usually seen in childhood. Despite the juxta-articular location, the amount and type of calcification appear to exclude synoviomas, which are extremely rare in children and usually have only scattered fine calcifications.

Pilomatrixomas (or calcifying epithelioma of Malherbe), as reported by Haller et al,[4] when heavily calcified have "confluent sand-like calcifications" and are dermal or subcutaneous. Broder et al[5] reported a case of pseudosarcomatous fasciitis with abundant calcifications and some bone formation because calcification in this subcutaneous lesion is considered rare. However, the calcification described was amorphous with some suggestion of trabeculation.

Myositis ossificans is a more common consideration of bulky coarse calcification, particularly in a parosteal or juxta-articular location. In a child with localized involvement, traumatic origin would be a prime consideration. The progressive type and the type associated with chronic or neuromuscular disease would not seem pertinent. Samuelson and Coleman,[6] in a review of four cases in young adults with no admitted trauma, proposed a "non-traumatic myositis ossificans in healthy individuals." By definition, the ossific appearance of the radiopaque mass and its conformity to muscle planes should facilitate distinction from the popcorn-like calcification of leiomyomas.

It would appear that tumoral calcinosis might present the greatest problem of differential diagnosis. According to Caffey,[2] it "occurs in otherwise healthy older children and young adults without associated calcification in other tissues." He offered the alternate nomenclature of "peribursal idiopathic calcification," observing "... lobulated patterns of calcium density which are diagnostic in themselves," adding that "large calciferous tumors have not been reported at the knees." More recently, Bostrom[7] did report bilateral tumoral calcinosis in the knees in a 5-month-old infant demonstrating "multiple irregular collections of calcified material anterior to the knees only." The knee was far down the list of joints usually involved. While the lobulated calcification shown in both discussions of tumoral calcinosis resembles that seen in our case, each of the lobules appears more homogeneous and amorphous than the somewhat multifocal and dense calcifications seen in leiomyomas.

As in the two cases reported by Ledesma-Medina et al,[1] the calcification in this patient is characteristic of that seen in uterine leiomyomas. The dense, capsule-like calcification partly surrounding these calcifications appears unique, but suggested radiographically that the lesion was benign. Although not previously observed in leiomyomas, this pseudocapsule could prove to be a diagnostic feature, since no such margination has been described in other calcified lesions. Total excision of the tumor reportedly has resulted in complete cure.[1]

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Giant Colonic Diverticulum

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Case report

A 73-year-old white male was evaluated after experiencing recurrent episodes of lower abdominal discomfort, intermittent diarrhea, and peripheral neuropathy. A barium enema revealed diffuse diverticulosis of the sigmoid colon (Figs 1, 2). The procedure was repeated six months later, and a giant diverticulum of the sigmoid colon was apparent (Figs 3, 4). Initially, the patient refused to undergo surgery; however, he later agreed when a right inguinal hernia became symptomatic. He denied any history of rectal bleeding, weight loss, or any symptom of urinary tract infection. He was admitted for elective colectomy and right inguinal herniorrhaphy.

On admission, he was noted to have muscle wasting of the lower extremities, along with some motor weakness. The abdomen was soft, with fullness in the left lower quadrant. On deep palpation, there was voluntary guarding, and a painful tympanic mass was palpated on the left side of the abdomen. The margins were vague.

A bowel prep was carried out and the patient was explored. A well-peritonialized cystic mass measuring 15 cm in diameter was found adherent to the dome of the urinary bladder. It was filled with gas and was rising from the antimesenteric border of the sigmoid colon. There was a comminution at least 1 cm wide between the gas-filled cyst and the sigmoid colon. An intraoperative cystogram and IVP were performed, and no comminution between the cyst and urinary bladder was seen. The cyst was dissected away from the urinary bladder and was resected along with a segment of sigmoid colon. End-to-end primary anastomosis of the colon was performed.

The cyst measured 0.8 cm in thickness and the interior had a cobblestone appearance (Fig 5). Histologic examination showed diverticulum partly lined by granulation tissue that was severely inflamed, with foreign-body giant cells present. In some areas, ulcerated colonic mucosa was seen. Smooth muscle was present in the wall of the diverticulum (Fig 6).

The patient recovered well and was discharged after 12 days.

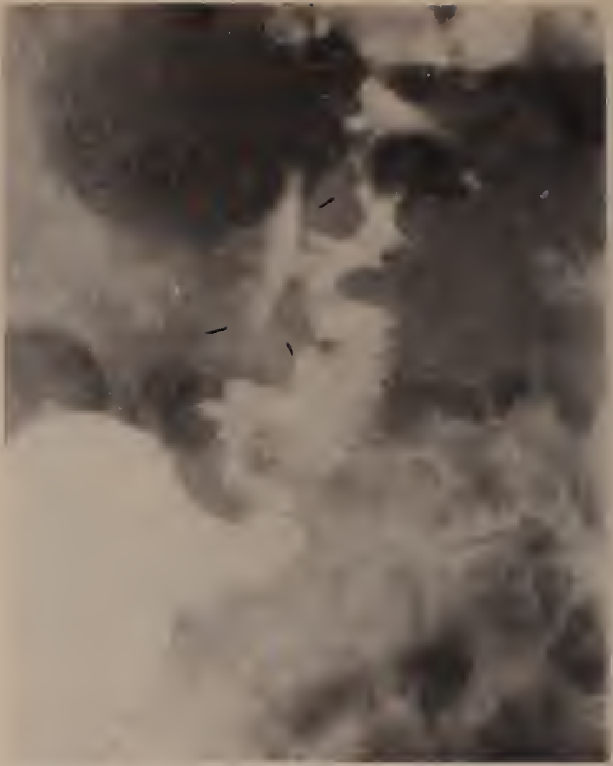

FIGURE 1. Diverticulum is partially filled, and communication between the diverticulum and the colon is clearly seen.

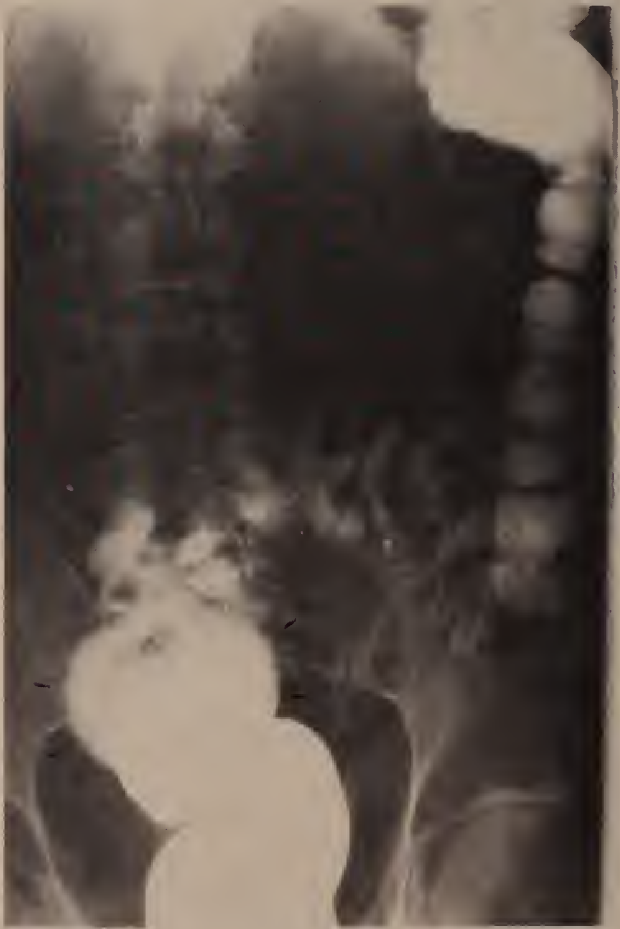

FIGURE 2. Diverticulum seen in an AP view.

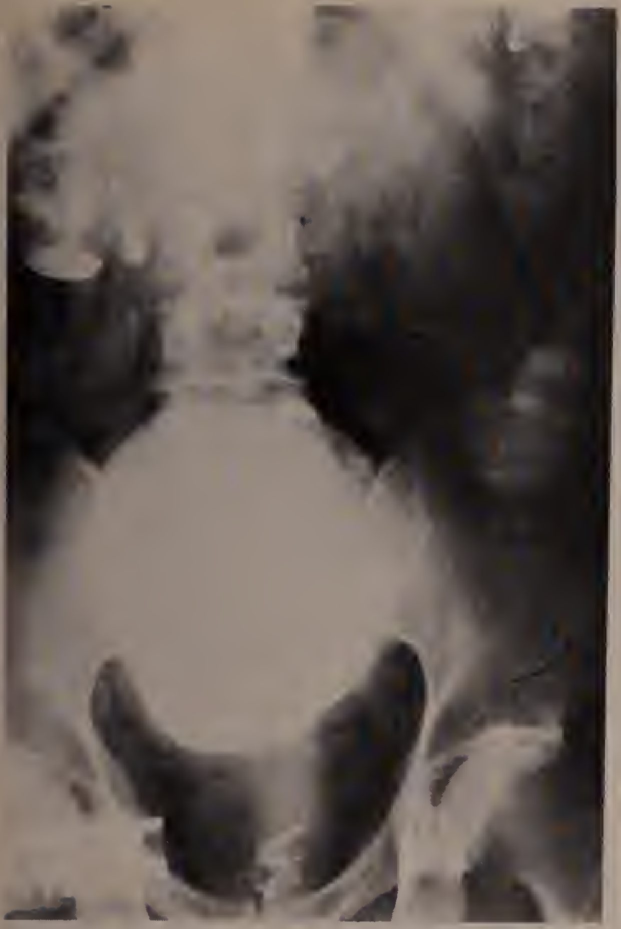

FIGURE 3. Barium enema repeated six months later shows enlarged diverticulum.

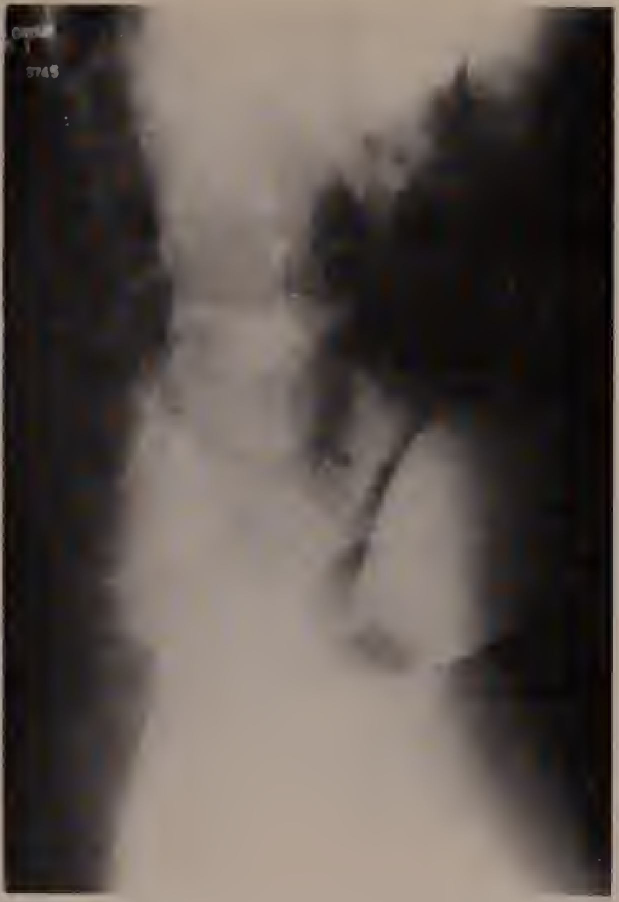

FIGURE 4. Same diverticulum as in Fig 3, seen on lateral view.

Comment

Giant diverticulum of the colon remains an uncommon clinical entity, despite an increase in the overall incidence of diverticular disease, which is an affliction of modern Western civilization. Diverticular disease is found in 35% of individuals over the age of 60 years.[1] Bonvin and Bonte first used the term "giant diverticulum of the sigmoid" to describe their case. Similar cases have been referred to as a solitary gas cyst of the colon, pneumocyst of the colon, giant gas cyst of the sigmoid, and giant air cyst of the abdomen. Giant sigmoid diverticulum has become the generally accepted term to describe the large cystic structure rising from the sigmoid colon.[2]

Giant colonic diverticulum usually occurs after the sixth decade, the age range being 38 to 89 years, with an average of 66 years. Only 12% of cases are noted under the age of 50 years, and there is no sex predominance. The size of the cyst ranges from 6 to 29 cm, and a palpable mass was found in 71% of reported cases.[1] In our review of the literature, associated diverticulosis has been reported in 94% of cases; however, Gallagher[1] reported an 80% incidence, the overall incidence of complication being 12%.[3] Location of the giant diverticulum has been reported in the sigmoid colon in 94% of the cases, with only one case reported in the transverse and one in the descending colon.[4] All but three cases reported the diverticulum rising from the antimesenteric side of the colon; those arising from the mesenteric side of the colon had a demonstrable muscular layer in the wall of the diverticulum, suggesting congenital origin.

Diagnosis

Patients having giant sigmoid diverticulum have been categorized into two distinct clinical groups: One group experiences abrupt onset of abdominal pain that may be accompanied by symptoms suggestive of diverticulitis; the second group has recurrent vague abdominal discomfort of a chronic nature.[2] Some patients may have an asymptomatic mass that enlarges on straining and decompresses frequently.[1]

The most helpful tool in making the diagnosis is the plain film of the abdomen, which showed an air-filled cyst in 70% of the cases.[3] Air fluid levels have been described in about 25% of the cases.[4] Barium enema examination reveals diverticulosis of the colon in most cases, and barium enters the giant divertic-

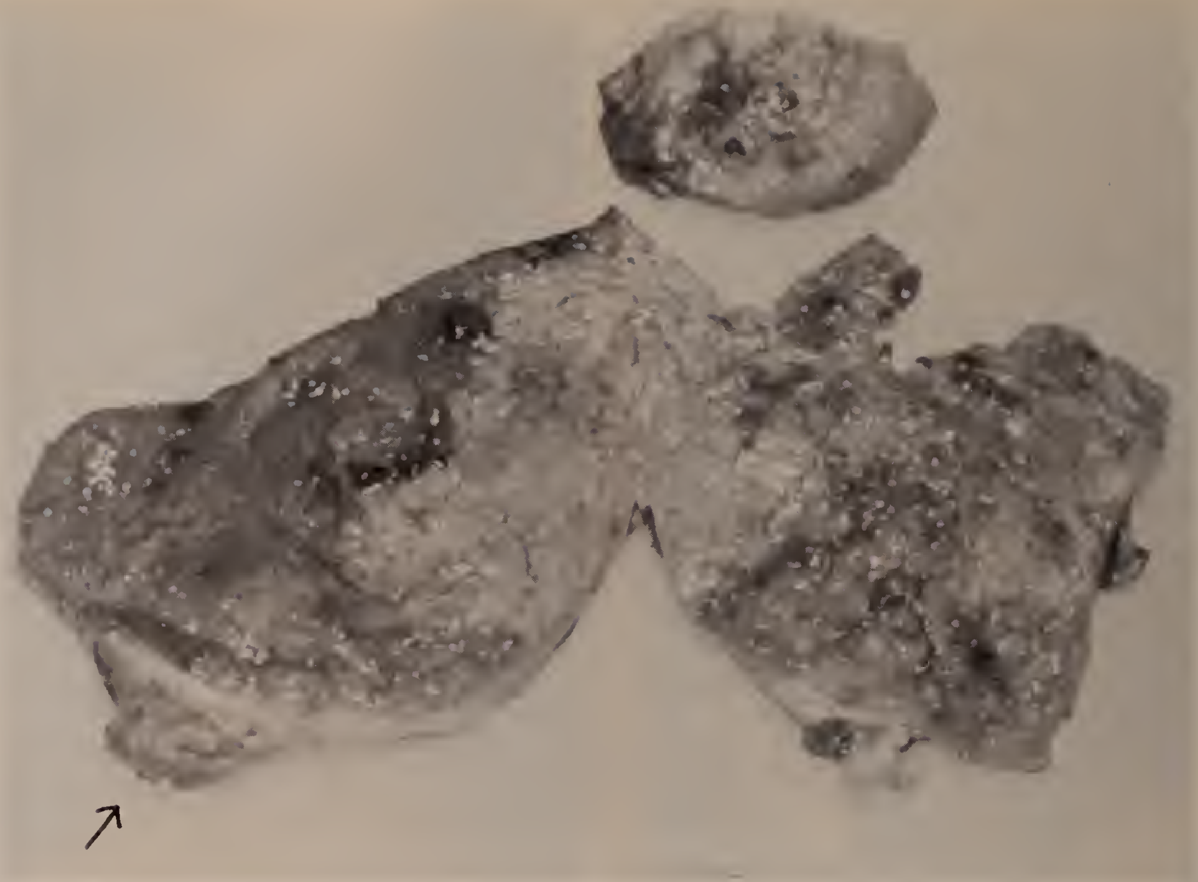

FIGURE 5. Gross appearance of diverticulum showing inner surface. Arrow points at the opening between the diverticulum and the colon (detached).

ulum in 60% of the cases. Occasionally, more than one large diverticulum is found. The adjacent colon is often irritable and edematous. The contour of the giant diverticulum is characteristically a smooth oval or rounded.[4]

A communication between the diverticulum and colon was demonstrated in 82% of the cases.[3] Pathologically, there are mainly two types of diverticula described: Those arising from the antimesenteric side of the colon (which comprises 94% of all cases) represent a pseudodiverticulum demonstrated by an absence of muscular and mucosal elements in the wall of the diverticulum. In these cases, the wall of the giant colonic diverticulum is composed of fibrous and richly vascular granulation tissue heavily infiltrated by chronic inflammatory and foreign-body giant cells.[1,5] The other group includes three reported cases in which some muscle and submucosa extending into the wall of the diverticulum were noted. These may represent the true diverticula or possibly duplication cysts and are all located on the mesenteric side of the colon.[2] These were likely congenital in origin, and no associated diverticular disease was seen in the colon. Gallagher[1] reported that presence of muscle in the wall of the cystic structure suggests that these were duplication cysts of the colon with communication, despite the age of the patient.

Etiology and pathogenesis

The etiology and pathogenesis of giant sigmoid diverticula remain controversial.[1–4,6] There are mainly two theories suggested[5]: One is that gas-forming microorganisms produce distention of the diverticulum once the stalk or communication with the colon has been blocked by debris or inflammation. Analysis of gas from the diverticulum suggests that at least some of the gas is produced by bacteria within the cyst.[1] The other theory proposes that associated inflammatory reaction allows the neck of the diverticulum to act as a ball valve, thus allowing gas to enter the diverticulum but not to exit.[2] The trapped air in the diverticulum increases during straining and is vented irregularly. Increased size of the diverticulum in time has been demonstrated radiologically (as in our case). Inflammatory tissue replaces the inner lining of the diverticulum, and scattered small remmants of mucosa have been demonstrated. These findings support the theory of pseudodiverticulum. Moss[2] has suggested the giant diverticulum to be the end result of a pulsion

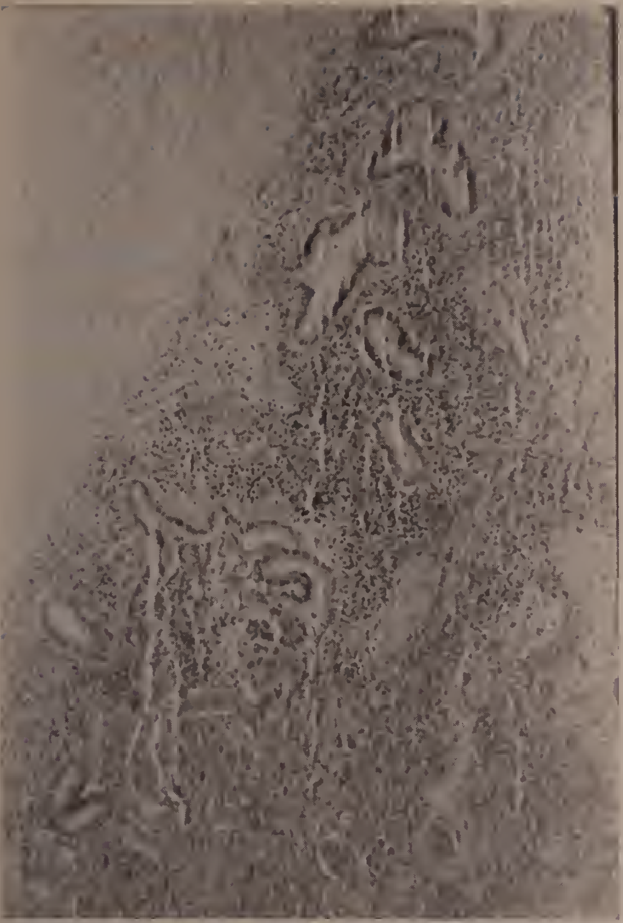

FIGURE 6. Microscopic appearance of the wall of the diverticulum. Granulation tissue seen on right upper portion, remmants of mucosa seen in the midportion, and muscles seen in left lower portion (H and E staining ×250).

diverticulum with superimposed infections resulting in destruction of normal mucosa and serosal tissue, with resultant fibrosis and granulation tissue. No convincing evidence is available to support either theory, but the pseudodiverticulum theory of ball-valve formation appears to be generally acceptable[1,2,5–7] for several reasons. At least two thirds of cases, as noted above, demonstrate communication with the colon. Frankenfeld[8] reported a case in which the cyst waxed and waned in size. At least one case in the literature is reported where the culture of diverticulum content was sterile.

The differential diagnosis is relatively limited. Several entities may appear as a large rounded radiolucency on the abdominal film. An enteric duplication cyst may occur along any part of the gastrointestinal tract. Such a cyst is always located along the mesenteric side of the bowel, is elongated, not cystic in appearance, occurs most often in younger patients, and usually does not communicate with the bowel lumen. Histologically, the wall of the duplication cyst contains all three layers of the normal bowel wall.[2] However, it is possible that complicating infection could cause a similar pathologic appearance and, in some cases, a duplication cyst has been recorded as a diverticular cyst.[7]

Our case is unique in two respects: It is the largest of all reported cases of giant colonic diverticula with all three layers present, and it is located on the antimesenteric border. Previously reported cases[3,9] with all three layers in the wall of the diverticulum were located on the mesenteric side of the colon. Also in contrast to the reported cases of diverticula with muscle layer demonstrated, our case is associated with diverticulosis of the colon.

A giant duodenal diverticulum may appear as a large radiolucency on the right side of the abdomen but is differentiated by barium upper-GI series. A Meckel's diverticulum may reach cystic proportion but is related to the distal ileum and has a wide communication with the bowel. Emphysematous cholecystitis and cholecystoenteric fistulae may demonstrate an air-filled cyst in the right upper quadrant. In either case, the gallbladder rarely attains the size of these diverticula, and the presence of air in the biliary tree, precedent history of right upper quadrant distress and acute prostrating illness associated with fever, and leukocytosis serve to differentiate these conditions.[6] Volvulus of a portion of the bowel produces signs of intestinal obstruction, which is not generally present in a patient with giant sigmoid diverticulum. In pneumatosis cystoides intestinalis, there is air in the bowel wall, but the gas does not form a solitary cyst.[2] Intraabdominal abscesses or an infected pseudocyst of the pancreas may contain gas-forming organisms and show air; however, their lack of mobility, associated clinical signs of sepsis, pancreatitis, and retroperitoneal location are usually pathognomonic.[6] The urinary bladder may become distended with air. The usual cause of this gas is a fistulous communication with the bowel or an infection with gas-forming organisms. However, the gas is readily voided and is rarely a cause of confusion. A voiding cystogram readily demonstrates the fistula. A necrotic tumor that communicates with the intestinal lumen may appear as a large collection of air, but the contour of the radiolucency is irregular.[4]

Complications

The complications have been limited. Our review reveals only four cases of perforation, which is the most frequent type of complication. Two cases had posterior perforation with air dissecting along the mesentery,[3,4] and one had a free perforation of the giant colonic diverticulum, with pneumoperitonium and peritonitis.[4] There was one case reported of perforation of the giant diverticulum, with a localized subserosal abscess of the adjacent colon. Other rare complications reported include one case each of the following: volvulus of the giant diverticulum,[10] carcinoma arising from the giant colonic divertIculum,[4] and focal infarction of the wall of the diverticulum.[6]

Management

We feel that these diverticula are best managed surgically. Although resection of the cyst alone has been reported in 25% of the cases,[6] the treatment of choice remains resection of the cyst and the adjacent sigmoid colon with a primary end-to-end anastomosis. In view of the wide mouth occasionally found in some of these diverticula, as well as inflammation in the adjacent bowel wall and associated diverticulosis, resection of the diverticulum in continuity with the involved sigmoid is the preferred mode of therapy. Primary anastomosis can usually be performed with impunity, and colostomy usually is not necessary. If an emergency procedure is done for complications, the operation should be staged, with initial sigmoid resection and construction of colostomy and a mucous fistula.

Three operative deaths have been reported, and there are no recorded cases of recurrent giant sigmoid diverticulum.

Summary

Although giant sigmoid diverticulum is uncommon (with only 54 cases reported to date in the world literature[1,4,10,11]), it may be diagnosed preoperatively. The combination of a large, soft, mobile abdominal mass in an elderly patient and a radiolucent cystic structure related to the sigmoid colon is strong evidence in support of this diagnosis. Barium enema examination, if performed in an elective situation, may outline a diverticulum in most cases and will likely show associated diverticular disease. In a case where the diverticulum is not filled by barium, other investigations will help differentiate similar air-filled intraabdominal structures.

Recommended treatment is resection of the diverticulum with the adjacent bowel and end-to-end anastomosis of the colon on an elective basis. A two-stage procedure is advantageous for complicated cases such as perforation.

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Acknowledgment. We wish to thank Mrs. Mabel Buck for research assistance and the Department of Medical Education of Wilson Hospital for manuscript preparation.

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The Physician's Sleep Glossary

Some common sleep laboratory terms

poly•som•no•graph. An instrument which simultaneously records by electrodes physiological variables during sleep—for example, brain activity (EEG), eye movements (EOG), muscle tonus (EMG) and other electrophysiological variables. These readings indicate precisely when patients fall asleep, how many wake periods they experience, the quality of sleep and the duration of sleep.

sleep la•ten•cy. The period of time measured from "lights out," or bedtime, to the commencement or onset of sleep.

wake time af•ter sleep on•set. Intervals of time spent awake between onset of sleep and the end of the sleep period. The polysomnograph registers the length and frequency of the intervals.

to•tal sleep time. The amount of time actually spent in sleeping. This is estimated by subtracting wake times from the period encompassed by the onset and the termination of sleep.[1]

REM/NREM. 1. REM, or rapid eye movement, sleep is "active"—characterized by increased metabolic rates, elevated temperature and arousal-type EEG patterns. 2. NREM, or non-rapid eye movement, sleep represents "quiet" sleep stages. There are four distinct stages of NREM sleep.[2]

re•bound in•som•nia. A statistically significant worsening of sleep compared to baseline on the nights immediately following discontinuation of sleep medication.[3]

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Please see summary of product information on following page.

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Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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(*continued from page 738*)

he opposes abortion; he does not oppose abortion because he receives pro-life aid. His colleague, Sen. Thomas Eagleton of Missouri, complains that the current method of election financing "virtually forces members of Congress to go around hat in hand, begging for money from Washington-based [PACs]." But that is only an argument for electing grittier congressmen. And it assumes, falsely, that large spending differentials must tilt elections: There is a fellow named Mark Dayton sitting somewhere in Minnesota with a bank book down $5.7 million and a funny look on his face and no "Sen." before his name.

PACs have obvious First Amendment pedigree, and have been found fully constitutional by the U.S. Supreme Court. Some liberals can recite Milton's Areopagitica as fluidly as a mobster takes the Fifth: "Who ever knew Truth put to the worse, in a free and open encounter?" Just so. PACs are as open as Wyoming's sky and are subject to encounter by opposing PACs — so what's the problem? Could it be that in the marketplace of ideas, liberals' merchandise is a slow mover?

(*Editorial, Richmond Times-Dispatch*)
Wednesday, February 23, 1983.

New York State Journal of Medicine

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April 1983 Volume 83 Number 6

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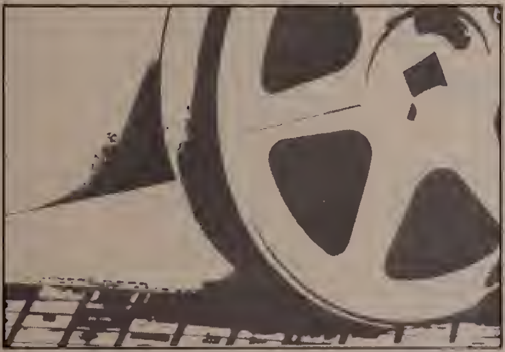

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Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae)*, *Haemophilus influenzae*, and *S pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS INCLUDING ANAPHYLAXIS TO BOTH DRUG CLASSES

Antibiotics including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins) therefore it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics Such colitis may range in severity from mild to life-threatening

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone In moderate to severe cases, management should include sigmoidoscopy appropriate bacteriologic studies and fluid electrolyte and protein supplementation When the colitis does not improve after the drug has been discontinued, or when it is severe oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C difficile* Other causes of colitis should be ruled out

Precautions *General Precautions*—If an allergic reaction to Ceclor occurs the drug should be discontinued and if necessary, the patient should be treated with appropriate agents e g , pressor amines antihistamines or corticosteroids

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms Careful observation of the patient is essential If superinfection occurs during therapy appropriate measures should be taken

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs testing of newborns whose mothers have received cephalosporin antibiotics before parturition it should be recognized that a positive Coombs test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function Under such conditions careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor a false-positive reaction for glucose in the urine may occur This has been observed with Benedict s and Fehling s solutions and also with Clinitest® tablets but not with Tes Tape® Glucose Enzymatic Test Strip USP Lilly)

Broad spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease particularly colitis

Usage in Pregnancy—*Pregnancy Category B*—Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor There are however no adequate and well-controlled studies in pregnant women Because animal reproduction studies are not always predictive of human response this drug should be used during pregnancy only if clearly needed

Nursing Mothers—Small amounts of Ceclor have been detected in mother s milk following administration of single 500-mg doses Average levels were 0 18 0 20 0 21 and 0 16 mcg ml at two three four and five hours respectively Trace amounts were detected at one hour The effect on nursing infants is not known Caution should be exercised when Ceclor® (cefaclor Lilly) is administered to a nursing woman

Usage in Children—Safety and effectiveness of this product for use in infants less than one month of age have not been established

Adverse Reactions Adverse effects considered related to therapy with Ceclor are uncommon and are listed below

Gastrointestinal symptoms occur in about 2 5 percent of patients and include diarrhea (1 in 70)

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment Nausea and vomiting have been reported rarely

Hypersensitivity reactions have been reported in about 1 5 percent of patients and include morbilliform eruptions (1 in 100) Pruritus urticaria, and positive Coombs tests each occur in less than 1 in 200 patients Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently fever) have been reported These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor Such reactions have been reported more frequently in children than in adults Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy No serious sequelae have been reported Antihistamines and corticosteroids appear to enhance resolution of the syndrome

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients)

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician

Hepatic—Slight elevations of SGOT, SGPT or alkaline phosphatase values (1 in 40)

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40)

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200)

[061782R]

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*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S pneumoniae* or *H influenzae* *

Note Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections including the prophylaxis of rheumatic fever See prescribing information

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Attention Delegates
Your Next Meeting

The 177th Annual Meeting of the Medical Society of the State of New York will be held at the Concord Hotel, Kiamesha Lake, New York, on . . .

OCTOBER 28th–31st, 1983

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Nominating Committee
1983

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Sixth District—Charles N. Aswad, M.D., Broome
Seventh District—James M. Flanagan, M.D., Wayne
Eighth District—Milford C. Maloney, M.D., Erie
Ninth District—S. Sheldon Katz, M.D., Rockland
Member-at-Large—Ralph M. Schwartz, M.D., Kings

Obituaries

John E. V. Aliberto, M.D., of Coral Springs, Florida died on July 4, 1982. He graduated from Georgetown University School of Medicine in 1937. He was a member of Westchester County Medical Society and the Medical Society of the State of New York.

Orlando Artuso, M.D., of Smithtown, died on October 13, 1982. He was 67 years old. Dr. Artuso was a 1946 graduate of the Universita di Napoli Facolta di Medicina e Chirurgia and belonged to the New York State Society of Anesthesiologists, the American Society of Anesthesiologists, Inc., the Suffolk County Medical Society and the Medical Society of the State of New York.

Richard W. Baetz, M.D., of Buffalo, died on December 13, 1982. He was 68 years old. He graduated from Western Reserve University School of Medicine in 1940 and was a Fellow of the American College of Obstetricians and Gynecologists and a Diplomate of the American Board of Obstetrics and Gynecology. His memberships include the Academy of Medicine, the Medical Society of the County of Erie, and the Medical Society of the State of New York.

Miroslav Bergam, M.D., of Brooklyn, died on January 2, 1983. He was 55 years old. Dr. Bergam was a Diplomate of the American Board of Ophthalmology, and a member of the Medical Society of the County of Kings and the Medical Society of the State of New York.

Irving H. Blaustein, M.D., of Brooklyn, died on January 27, 1983 at the age of 71. He graduated in 1938 from the Eclectic Medical College. Dr. Blaustein was a member of the Medical Society of the County of Kings and the Medical Society of the State of New York.

Charles E. Brennan, M.D., of Brewster, died on December 7, 1982. Dr. Brennan was a 1931 graduate of the New York University College of Medicine and his memberships included the Medical Society of the County of Kings and the Medical Society of the State of New York.

Eric C. Caminer, M.D., of Scarsdale, died on November 12, 1982 at the age of 90. He graduated from Friedrich-Wilhelms-Universitat Med Fakultat, Berlin, Prussia in 1920 and was a member of the New York County Medical Society and the Medical Society of the State of New York.

William R. Carman, M.D., of Islip, died on November 30, 1982. He was 80 years old and a 1930 graduate of the Long Island College of Medicine. His memberships included the Suffolk County Medical Society and the Medical Society of the State of New York.

Robert T. Curley, M.D., of Rockville Centre, died on December 29, 1982 at the age of 68. He was a 1939 graduate of the Long Island College of Medicine, a Fellow of the American College of Physicians and Diplomate of the American Board of Internal Medicine. He was a member of the Academy of Medicine, the Westchester County Medical Society, and the Medical Society of the State of New York.

George J. DeVito, M.D., of Brooklyn, died on December 28, 1982 at the age of 52. He graduated from the Universita Degli Studi di Bologna, Facolta di Medicine e Chirurgia in 1957. Dr. DeVito was a Fellow of the American College of Surgeons and a Diplomate of the American Board of Orthopedic Surgery. He was a member of the American Academy of Orthopaedic Surgeons, Medical Society of the County of Queens, and the Medical Society of the State of New York.

William F. Doney, M.D., of Albany, died on December 7, 1982 at the age of 67. He graduated the Albany Medical College of Union University in 1941. He was a Fellow of the American College of Obstetricians and Gynecologists and a Diplomate of the American Board of Obstetrics and Gynecology. His memberships included the Medical Society of the County of Albany and the Medical Society of the State of New York.

Fred S. Dunn, M.D., of Manchester Depot, Vermont died on August 2, 1982 at the age of 86. Dr. Dunn was a 1925 graduate of Columbia University College of Physicians and Surgeons. He was a member of the New York County

Medical Society and the Medical Society of the State of New York.

Harold B. Eiber, M.D., of New York City, died on December 21, 1982 at the age of 67. He graduated from the Universite de Lausanne Faculte de Medecine in 1941. Dr. Eiber was a Fellow of the American College of Angiology and a member of the Academy of Medicine, the Society for Experimental Biology and Medicine, the American Association for Cancer Research, the New York County Medical Society and the Medical Society of the State of New York.

Frederic Feldman, M.D., of Neponsit, died on November 29, 1982 at the age of 83. He was a 1924 graduate of the New York University College of Medicine and a member of the New York State Society of Internal Medicine, International Society of Hematology, American Society of Internal Medicine, Medical Society of the County of Kings, and the Medical Society of the State of New York.

Jose M. Ferrer, Jr., M.D., of New York City died on December 24, 1982. He was 70 years old. In 1938 he graduated from Columbia University College of Physicians and Surgeons. Dr. Ferrer was a member of the Academy of Medicine, New York State Surgical Society, New York Gastroenterological Society, New York County Medical Society, Medical Society of the State of New York; and he was a Fellow of the American College of Surgeons and a Diplomate of the American Board of Surgery.

Rubin A. Gerber, M.D., of New York City died on December 15, 1982 at the age of 87. In 1917 he graduated from Long Island College Hospital. Dr. Gerber was a member of the New York Neurological Society, the American Academy of Neurology, the American Psychiatric Association and was a Diplomate of the American Board of Psychiatry and Neurology. He was also a member of the New York County Medical Society and the Medical Society of the State of New York.

Emanuel F. Kalina, M.D., of Elmhurst, died on October 28, 1982 at the age of 84. He graduated in 1922 from New York University College of Medicine and was a Fellow of the American College of Angiology and the American College of Chest Physicians. He was a member of the Medical Society of the County of Queens and the Medical Society of the State of New York.

Max L. Kamen, D.O., of New York City, died on September 14, 1982. He was 69 years old. Dr. Kamen graduated in 1946 from the Philadelphia College of Osteopathic Medicine and was a member of the New York County Medical Society and the Medical Society of the State of New York.

John L. Klauber, M.D., of Bronx, died on November 20, 1982 at the age of 68. He was a 1938 graduate of Medizinische Fakultat der Universitat, Wien. He was a member of the New York Cardiological Society, New York State Society of Internal Medicine, American Geriatric Society, Bronx County Medical Society, Medical Society of the State of New York.

Hans G. Lowenkron, M.D., of Sayville, died on December 6, 1982 at the age of 75. He graduated from the Medizinische Fakultat der Universitat, Wien in 1932 and was a member of the Suffolk County Medical Society and the Medical Society of the State of New York.

Mark Lynton, M.D., of New York City, died on December 19, 1982. He was 85 years old. Dr. Lynton graduated in 1923 from the Universytet Warszawski Akademie Medyczna, Warsawa. He was a Fellow of the American College of Radiology and a Diplomate of the American Board of Radiology. His memberships included the New York County Medical Society and the Medical Society of the State of New York.

George B. Madison, M.D., of Syracuse died on December 4, 1982. Dr. Madison was 83 years and a 1941 graduate of SUNY Syracuse Medical Center. He was a Diplomate of the American Board of Obstetrics and Gynecology and his memberships included the Onandaga Medical Society and the Medical Society of the State of New York.

Richard H. Marshak, M.D., of New York City, died on December 20, 1982 at the age of 70. He graduated from the University of Louisville School of Medicine in 1937. He was a Fellow of the American College of Radiology, Fellow of the American College of Gastroenterology, and a Diplomate of the American Board of Radiology. Dr. Marshak was a member of the Academy of Medicine, New York Roentgen Society, American Gastroenterological Association, American Roentgen Ray Society, Radiological Society of North America, Inc., New York County Medical Society, Medical Society of the State of New York.

Fritz F. Mevs, M.D., of Lockport, died on December 13, 1982. He was 55 years old and a 1952 graduate of the Ecole Nationale de Medecine et de Pharmacie, Port-Au-Prince. Dr. Mevs was a Fellow of the American College of Pathologists, Diplomate of the American Board of Pathology; and a member of the New York Pathological Society, American Society of Clinical Pathologists, Medical Society of the County of Niagara, and Medical Society of the State of New York.

John J. Murphy, M.D., of Islip, died on January 23, 1983 at the age of 66. He was a 1941 graduate of Temple University School of Medicine. Dr. Murphy was a Fellow of the American College of Surgeons, Diplomate of the American Board of Urology and a member of the American Urological Association, Suffolk County Medical Society, and the Medical Society of the State of New York.

Foster Murray, M.D., of Princeton, New Jersey died on December 12, 1982 at the age of 98. He graduated from Cornell University Medical College in 1908 and was a member of the Medical Society of the County of Kings and the Medical Society of the State of New York.

Samuel Nelson, M.D., of Bath, died on May 12, 1982 at the age of 74. He was a 1938 graduate of Friedrich-Wilhelms-Universitat Medizinische Fakultat, Berlin, Prussia. His memberships included the Radiological Society of New York State, Radiological Society of North America Inc. He was a Diplomate of the American Board of Radiology and member of the Steuben County Medical Society, and the Medical Society of the State of New York.

Herbert J. Palmer, M.D., of Forest Hills, died on November 20, 1982 at the age of 85. He graduated in 1923 from Schlesische-Friedrich-Wilhelms-Univ Med Fakultat, Breslau, Prussia and was a Diplomate of the American Board of Pediatrics. He was a member of the New York County Medical Society and the Medical Society of the State of New York.

Paul T. Perugini, M.D., of New Rochelle, died on July 8, 1982. He was 72 years old. He graduated in 1937 from Long Island College of Medicine. He was a Fellow of the American College of Physicians and a Diplomate of the American Board of Internal Medicine. His memberships include the Academy of Medicine, New York State Society of Internal Medicine, Westchester County Medical Society, Medical Society of the State of New York.

Winifred A. Phillips, M.D., of Greenlawn, died on July 4, 1982 at the age of 70. She graduated from the New York Medical College, Flower and Fifth Avenue Hospitals in 1941. Dr. Phillips was a Diplomate of the American Board of Radiology and a member of the Academy of Medicine, the New York Roentgen Society, the New York County Medical Society, and the Medical Society of the State of New York.

Gaetano E. Piana, M.D., of Flushing, died on November 22, 1983 at the age of 71. He graduated from the Universite de Paris Faculte de Medecine in 1938 was a member of the American Psychiatric Association, the Medical Society of the County of Queens, and the Medical Society of the State of New York.

George Pollack, M.D., of Lauderhill, Florida died on December 28, 1982. He was 73 years old. Dr. Pollack was a 1935 Licentiate of the Royal College of Physicians of London and a member of the Medical Society of the County of Kings and the Medical Society of the State of New York.

Joseph Rock, M.D., of Pittsford, died on November 12, 1982. He was 79 years old and a 1932 graduate of Rush Medical College. Dr. Rock was a member of the Medical Society of the County of Monroe, Inc. and the Medical Society of the State of New York.

Julian L. Rogatz, M.D., of New York City, died December 9, 1982 at the age of 84. He graduated from Columbia University College of Physicians and Surgeons in 1920. He was a Diplomate of the American Board of Pediatrics, a member of the Academy of Medicine, American Academy of Pediatrics, New York County Medical Society, and Medical Society of the State of New York.

Harold L. Rolbin, M.D., of Hallandale, Florida died on November 19, 1982 at the age of 67. He graduated in 1940 from the Royal College of Physicians of Edinburgh. He was a Diplomate of the American Board of Internal Medicine and a member of the Bronx County Medical Society and the Medical Society of the State of New York.

Gertrude H. Rosenhain, M.D., of Jackson Heights, died on January 4, 1983 at the age of 96. She graduated from Schlesische-Friedrich-Wilhelms-Univ Med Fakultat, Breslau, Prussia in 1917. She was a member of the New York County Medical Society and the Medical Society of the State of New York.

Ferdinand Rossetti, M.D., of Newburgh, died on November 19, 1982 at the age of 56. He graduated from the Universite de Geneve Faculte de Medecine in 1957. Dr. Rossetti was a member of the Medical Society of the County of Orange and the Medical Society of the State of New York.

Godchaux Schnerb, M.D., of New York City, died on November 16, 1982 at the age of 85. He graduated in 1921 from Julius-Maximilians-Univ Med Fakultat, Wurzburg, Bavaria and was a member of the New York County Medical Society and the Medical Society of the State of New York.

Paul M. Schwartz, M.D., of Poughkeepsie, died January 31, 1982 at the age of 73. He graduated from the University of Maryland School of Medicine in 1933. He was a Fellow of the American College of Allergists and a member of the American Academy of Allergy, American Association for Cancer Research, Dutchess County Medical Society, and Medical Society of the State of New York.

Silas F. Scinta, M.D., of Louisville, Kentucky died on October 28, 1982. He was 83 years old. He graduated from the University of Buffalo School of Medicine in 1927 and was a member of the Medical Society of the County of Monroe and the Medical Society of the State of New York.

Emanuel Simon, M.D., of Albany, died on November 2, 1982 at the age of 80. He was a 1928 graduate of the Albany Medical College of Union University. Dr. Simon was a Diplomate of the American Board of Otolaryngology and a member of the American Academy of Otolaryngology, the Medical Society of the County of Albany, and the Medical Society of the State of New York.

S. Geoffrey Stead, M.D., of Hilton, died on December 2, 1982. He was 40 years old and a 1965 graduate of the Faculty of Medicine of the University of Liverpool. He was a member of the American Academy of Family Practice, the Medical Society of the County of Monroe, and the Medical Society of the State of New York.

Hilton H. Stothers, M.D., of New York City, died on January 14, 1983 at the age of 83. He was a 1923 graduate of the University of Western Ontario Faculty of Medicine. Dr. Stothers was a Fellow of the American College of Surgeons, and Diplomate of the American Board of Otolaryngology. He was a member of the Academy of Medicine, New York Society of Laryngology and Otology, American Academy of Otolaryngology, American Laryngological, Rhinological and Otological Society, American Bronchoesophagological Association, New York County Medical Society, and the Medical Society of the State of New York.

Robert J. Striegel, M.D., of Williamsville, died on January 9, 1983 at the age of 76. He was a 1933 graduate of Creighton University School of Medicine. He was a Fellow of the American College of Allergists and his memberships include the American Academy of Allergy, the Medical Society of the County of Erie, and the Medical Society of the State of New York.

Rocco F. Troiano, M.D., of Yonkers, died on September 6, 1982. He was 66 years old. He graduated in 1943 from Creighton University School of Medicine. His memberships include the Academy of Medicine, Westchester County Medical Society, and the Medical Society of the State of New York.

Ernest Turecki, M.D., of North Tonawanda, died on December 3, 1982 at the age of 35. He graduated from the Universidad Autonoma Facultad de Medicina, Guadalajara in 1978 and his memberships included the Medical Society of the County of Niagara and the Medical Society of the State of New York.

Richard F. Wagner, M.D., of Islip, died on January 1, 1983 at the age of 61. Dr. Wagner was a 1951 graduate of New York Medical College, Flower and Fifth Avenue Hospital. He was a member of the Suffolk County Medical Society and the Medical Society of the State of New York.

William W. Walker, M.D., of Yonkers, died on May 22, 1982 at the age of 68. He graduated from Cornell University Medical College in 1940. His memberships included the Academy of Medicine, Westchester County Medical Society, and the Medical Society of the State of New York.

Medical Society of the State of New York

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SCHEDULE OF SCIENTIFIC MEETINGS

1983 ANNUAL CME ASSEMBLY

Medical Society of the State of New York
Rye Town Hilton, Port Chester, New York

FRIDAY, MAY 13

Morning: 9–12	GENERAL SESSION—"MEDICAL IMPLICATIONS OF THE NUCLEAR AGE".
Afternoon:	Chest Diseases Dermatology & Syphilology Gastroenterology & Colon & Rectal Surgery/Radiology Medical Legal & Workers' Compensation/Occupational Medicine Neurology

SATURDAY, MAY 14

Morning:	Cardiovascular Diseases Emergency Medicine/Anesthesiology/Psychiatry/Preventive Medicine/Family Practice Internal Medicine/Hand Surgery Neurosurgery Ophthalmology Surgery Urology/Radiology
Afternoon:	Emergency Medicine/Anesthesiology/Psychiatry/Preventive Medicine/Family Practice (*cont'd*) Internal Medicine/Hand Surgery (*cont'd*) Ophthalmology (*cont'd*) Otolaryngology—Head & Neck Surgery Medical Liability Mutual Insurance Co. & MSSNY Pathology School Health/Orthopedic Surgery

SUNDAY, MAY 15

Morning:	Allergy & Immunology Obstetrics & Gynecology/Pediatrics Plastic, Reconstructive, and Maxillofacial Surgery Physical Medicine & Rehabilitation Women's Medical Society of New York State

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CME CREDITS: Each program will be eligible for CME Catogory 1 credits on an hour-for-hour basis.

■

TECHNICAL EXHIBITS

THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

Annual CME Assembly

Friday, May 13—Sunday, May 15, 1983

Medical Practice in the Nuclear Age

All physicians are invited to attend our Annual Continuing Medical Education Program to be held at the Rye Town Hilton. You will have the opportunity to acquire Category I CME Credits during 2½ days of outstanding General Sessions, Symposia, and Panel Discussions. Highlighting the Assembly, will be the General Session entitled "Medical Implications of the Nuclear Age." Our meetings are designed to inform the physician of the latest developments not only in ones' specialty, but in other areas of medicine as well.

Each morning before the meetings begin, registrants will have the opportunity to converse with their colleagues over coffee and Danish—compliments of the Medical Society of the State of New York. There will be Technical Exhibits on display to acquaint the physician with new products and services that will help in providing better medical care. Come join your friends and colleagues in a relaxed setting.

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at the
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City________________State________Zip________

Arr. Date________Hour______a.m./p.m. Dep. Date____________

For more than 2 rooms, contact reservation Mgr.

PLEASE CIRCLE RATE REQUESTED

SINGLE:	$77	$82	$87	$92	$97
DOUBLE/TWIN:	$87	$92	$97	$102	$107
SUITES:	$185 and up				

MEDICAL SOCIETY OF THE
STATE OF NEW YORK
1983 CME ASSEMBLY
MAY 13–15, 1983
SUITES ON REQUEST TO HOTEL

☐ CONFIRMATION REQUESTED
If two or more to occupy room, name of joiner(s)

____

If a range of rates is offered and the rate requested is not available, the next available rate will be assigned. Reservation requests must be received no later than April 20, 1983, and will be held until 6:00 p.m. on the date of arrival unless otherwise specified.

If reservations are made by telephone, you must Identify the Medical Society meeting for the special rate to apply. Rates subject to applicable sales tax.

RESTAURANTS

Penfield's for gracious dining—an adventure in gourmet food. Also the Tulip Tree for casual meals and buffet in a cheerful setting.

GUEST ROOMS

Each has color TV with AM/FM radio, refrigerator and coffee maker. Rooms are beautifully appointed with large windows overlooking the wooded grounds and gardens.

HOTEL RESERVATIONS

Physicians must make their own hotel reservations no later than April 20, 1983. If making reservations by telephone, please identify the Medical Society meeting for special rate to apply.

AMPLE PARKING

TRANSPORTATION

Convenient regularly scheduled ground transportation is available from LaGuardia and Kennedy Airports. On arrival, go to the baggage claim area and look for Airport Transportation Services free courtesy phone (it's red). From airports, service is throughout the day and evening with departures every hour (½ hour service during peak travel times). Last departure leaves Kennedy at 11:30 p.m. and LaGuardia at 11:45 p.m. Current one-way fare: $11.00; round trip fare: $21.00.

By train from Manhattan (Grand Central Station), take the New Haven line to Rye, New York (about 45 minutes). From the Rye Station, it is a 5 minute taxi ride to the Rye Town Hilton.

FRIDAY RECEPTION

A reception for member physicians, spouses, and exhibitors will be held from 6:00 p.m. to 7:00 p.m. Compliments of the Medical Society of the State of New York.

SATURDAY RECEPTION & DINNER DANCE

All physicians and their guests are invited to attend the Medical Society dinner dance on Saturday, May 14th. MSSNY President, Richard S. Eberle, M.D., will be the guest speaker. A reception sponsored by the Medical Society of the State of New York will

begin at 7:00 p.m. Dinner will be served at 8:00 p.m. $40.00 per person.

MEETING HOURS

Friday, May 13: 9:00 a.m.–5:00 p.m.
Saturday, May 14: 9:00 a.m.–5:00 p.m.
Sunday, May 15: 9:00 a.m.–1:00 p.m.

EXHIBIT HOURS

Friday, May 13: 8:30 a.m.–5:00 p.m.
Saturday, May 14: 8:30 a.m.–5:00 p.m.
Sunday, May 15: 8:30 a.m.–1:00 p.m.

INTERMISSIONS

Coffee & Danish, compliments of MSSNY, will be served each morning from 8:00 a.m. to 8:45 a.m. There will be morning and afternoon intermissions for coffee, and to allow time to visit the exhibits.

REGISTRATION

Registration is open to MSSNY members and their guests, nonmember physicians, medical students, and members of the allied professions. There is no registration fee. Registration hours will be: Thursday, May 12 from 4:00 p.m.–7:00 p.m.; Friday, May 13 from 8:00 a.m.–5:00 p.m.; Saturday, May 14 from 8:00 a.m.–5:00 p.m.; Sunday, May 15 from 8:00 a.m.–12:30 p.m. All meetings and exhibits will close at 1:00 p.m. on Sunday.

PRE-REGISTRATION—Your badge and dinner tickets will be held at the MSSNY Registration Desk in the Grand Ballroom.

PRE-REGISTRATION FORM
1983 Annual CME Assembly, May 13–15
RYE TOWN HILTON

Complete and mail this form to the Medical Society address as indicated below.

(please print)

☐ Allied
☐ M.D.

Name____
(last) (first) (initial)

Address____

City & State______________________________Zip__________

Member of MSSNY: Yes________No________Specialty____________________

Note: There is no registration fee.

Saturday Reception & Dinner/Dance________tickets @ $40.00. Total____________

Please make checks payable to: Medical Society of the State of New York, clip and mail to Division of Advertising & Meeting Services, Medical Society of the State of New York, 420 Lakeville Rd., P.O. Box 5404, Lake Success, New York 11042.

Directions to the Rye Town Hilton

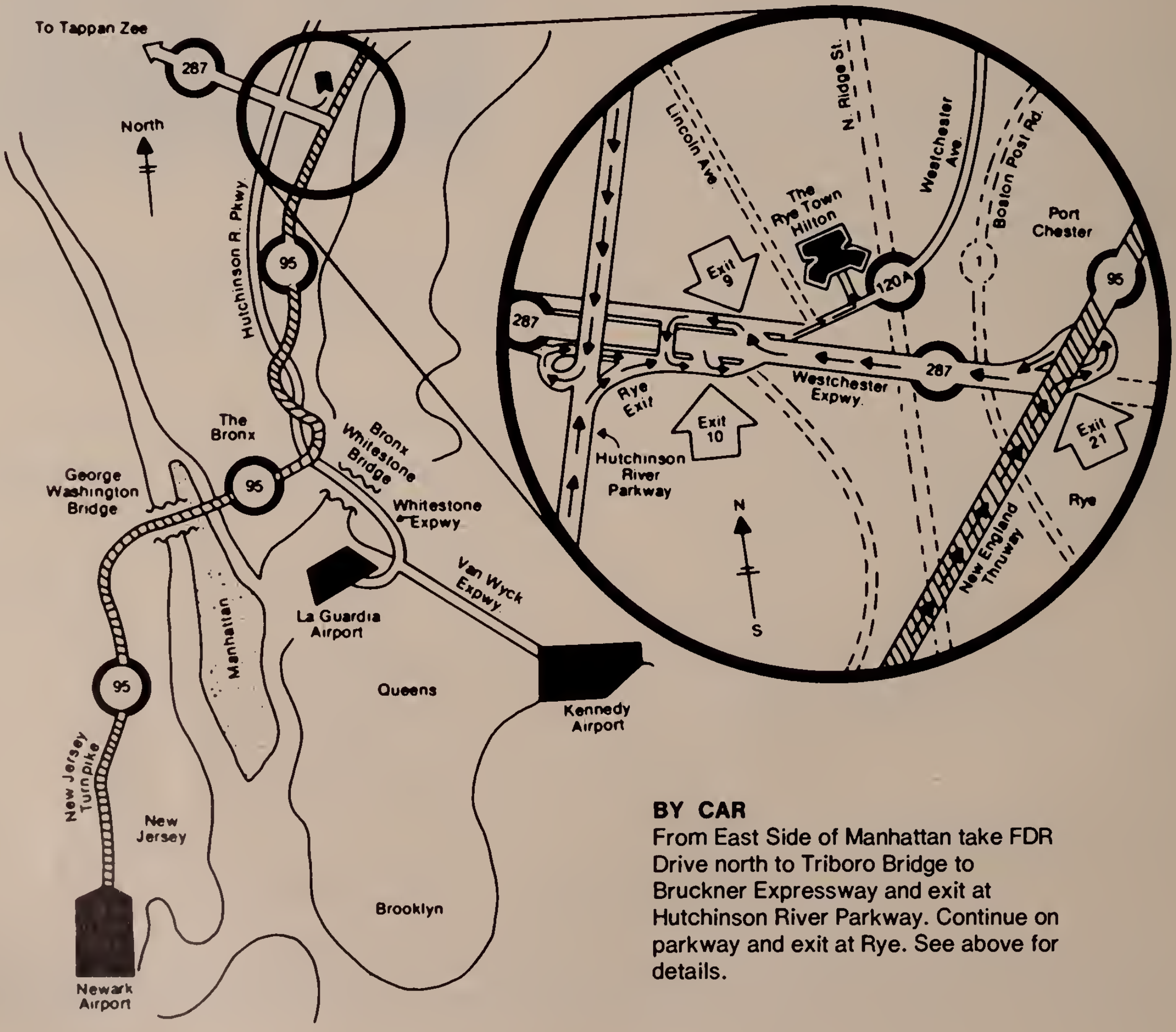
699 Westchester Avenue Town of Rye Port Chester, New York

from major New York Metropolitan Airports

FROM LAGUARDIA AIRPORT
Take the Whitestone Expressway over the Bronx-Whitestone Bridge. Follow signs to Hutchinson River Parkway. Proceed on Hutchinson River Parkway to the Rye Exit to Westchester Ave. (120A). Proceed east on Westchester Ave. following signs to Port Chester. Turn left at Rye Town Hilton entrance (at stop light).

FROM KENNEDY AIRPORT
Take Van Wyck Expressway to Whitestone Expressway. Proceed on Whitestone Expressway over the Bronx-Whitestone Bridge. Follow signs to Hutchinson River Parkway. Proceed on Hutchinson River Parkway to the Rye Exit to Westchester Ave. (120A). Proceed east on Westchester Ave., following signs to Port Chester. Turn left at Rye Town Hilton entrance (at stop light).

FROM NEWARK AIRPORT
Take New Jersey Turnpike (95) to the George Washington Bridge. Proceed on U.S. 95 to Cross Westchester Expressway Exit 21. Proceed west on Cross Westchester Expressway (287) to Exit 9. Turn left at first traffic light onto Kennilworth Road. Turn left immediately at second traffic light onto Westchester Ave. (120A). Proceed east on Westchester Ave., following signs to Port Chester. Turn left at Rye Town Hilton entrance (at stop light).



BY CAR
From East Side of Manhattan take FDR Drive north to Triboro Bridge to Bruckner Expressway and exit at Hutchinson River Parkway. Continue on parkway and exit at Rye. See above for details.

Classified Advertising Rates

New York State Journal of Medicine

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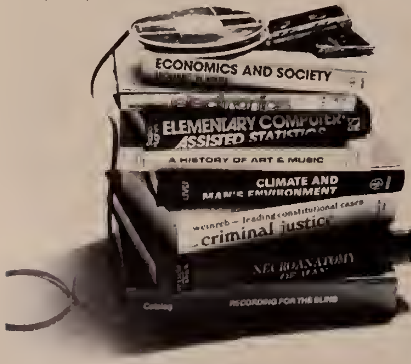

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MEDICAL SOCIETY OF THE
STATE OF NEW YORK

1983 CME ASSEMBLY

MAY 13–15

Rye Town Hilton, Port Chester, NY

PHYSICIANS WANTED

PHYSICIANS NEEDED FOR 75 SUMMER children's camps located in the Northeast July and August or a single month. Contact: Association of Independent Camps (M) 157 West 57th Street, New York, N. Y. 10019. (212) 582-3540.

OB/GYN—BOARD CERTIFIED/ELIGIBLE, for established hospital based multispecialty group in beautiful Catskill mountain area of upstate New York. Negotiable salary with excellent fringe benefits including malpractice coverage and assistance with relocation expenses. Group employs a certified nurse/midwife. Position immediately available. Send c.v. to Thomas E. Lavell, M.D., Delaware Valley Hospital, 1 Titus Place, Walton, N.Y. 13856. (607) 865-6526.

TEXAS NEEDS DOCTORS. Immediate openings for family physicians, emer. room, gen. surgeon, internists, neurologist, ob/gyn, ophthalmologist, orthopods, ent., and pedis in Dallas and other cities/towns throughout the state. Group or solo opportunities with generous guarantees where they need additional physicians, and other physicians will give you referrals. Vacancies available because of retirement. No state income or corporate taxes in Texas. No fee. Contact Texas Doctors Group, Box 177, Austin, Texas 78767. (512) 476-7129.

PHYSICIAN—FULL AND PART-TIME positions available in neighborhood Health Centers of the Erie County Health Department. An Equal Opportunity Employer. Candidates must be licensed to practice medicine in NYS and must be board certified or board eligible in Family Practice or Internal Medicine. Send resume to: Personnel Office, Room 900, Erie County Health Department, 95 Franklin Street, Buffalo, NY 14202.

WANTED INTERNIST, NASSAU COUNTY, NY Board certified/eligible, with/without subspecialty to join growing private practice. Reply Dept. 277, c/o NYSJM.

DERMATOLOGIST, OPHTHALMOLOGIST, Otolaryngologist, and family physician needed: 50 miles north N.Y.C. Modern professional building. Heat, a/c inc. Space can be altered to suit need. Contact Dr. B. Poritzky, 22 Putnam Professional Park, Mahopac, N.Y. 10541. Tel. (914) 628-8454 or (914) 628-3473.

PHYSICIAN DURING JULY AND AUGUST 1983 for children's camp located at Beach Lake, Pa., accommodates 350 campers, age 6-16; complete modern Health Center; 2 R.N.'s in attendance; will accept one M.D. for each month; no children accepted who are of camp age. Camp opens June 29 and closes August 23. Private room and facilities. Write (and include your phone number) to Trail's End Camp, c/o Beach Lake, Inc., 215 Adams Street, Brooklyn, N. Y. 11201.

PHYSICIANS WANTED—CONT'D

EMERGENCY PHYSICIANS - CATSKILL Region; progressive 300-bed JCAH accredited hospital with full specialty back-up, modern facilities, & highly-skilled support personnel is recruiting for July, 1983. Good opportunity for experienced emergency department physicians who are Board Eligible/Certified in IM,FP, Surg, or ER to work in well-respected, active department. Ideally located 1 hour from Albany, 2 hours from NYC. Reply with CV to Dept. 282, c/o NYSJM.

PHYSICIANS—GREATER NEW YORK AREA. All specialties. Board certified or eligible preferred. No malpractice insurance required. Reply Dept. 281, c/o NYSJM.

PHYSICIANS—PRIVATE HEALTH and social research organization is seeking physicians for a health and nutrition examination survey sponsored by the U.S. Public Health Service. Physicians will conduct physical examinations using government supplied mobile examination centers in 30–35 selected areas of the United States through December 1984. Candidates must be bilingual in Spanish/English, licensed in at least one state and meet full-time travel requirements. Competitive salaries, per diem and travel allowances. EOE/M/F/V/H. Send resume to: WESTAT, Attn: Personnel Dept., 1650 Research Blvd., Rockville, MD. 20850.

ORTHOPEDISTS NEEDED full or part time in Syracuse and Buffalo for Worker's Compensation and Auto Liability evaluations. Modern private clinics, excellent conditions and remuneration. Phone collect H. Lewis, M.D. (313) 767-2600.

EXCELLENT OPPORTUNITY in private practice for qualified internist, pediatrician, OB-GYN, in fine solidly middle class community—1 hour north of New York City. Call Dr. Adler (914) 278-2121.

BOARD ELIGIBLE ANESTHESIOLOGIST. Immediate opening. Established corporation located in Danville, Illinois. Full or part time. Good opportunity for personal financial growth. Contact: William Grant, M.D., Danville Anesthesia Associates, P.O. Box 588, Danville, IL 61832. (217) 443-5629.

PHYSICIAN ASSISTANT—Large private Central New York geriatric facility seeks R.P.A. for one of two M.D.-R.P.A. teams. Excellent salary and benefit package. Send resume and salary requirements in confidence to Dept. 283, c/o NYSJM.

POSITIONS WANTED

RADIOLOGIST—Mature, B C, available part time for film reading, G I work. Manhattan or Westchester preferred. (212) 457-1300, ext. 241.

PRACTICES AVAILABLE

GOOD OPPORTUNITY FOR FAMILY Physician or Internist to settle in Westchester County. Well established 36 year old practice. Terms negotiable. Will introduce. Spanish helpful. 10 am–4 pm (914) 939-1080.

INTERNIST—TO ASSOCIATE—object sell practice in 17 months. Sheepshead Bay, Brooklyn. Available now. Send C.V. and phone number to Box 101, Homecrest Station, Brooklyn, N.Y. 11229.

MISCELLANEOUS

PHYSICIANS SIGNATURE LOANS TO $50,000. Take up to 7 years to repay with no pre-payment penalties. Competitive fixed rate, with no points, fees or charges of any kind. Use for taxes, investment, consolidation or any other purpose. Prompt, courteous service. Physicians Service Association, Atlanta, GA. Serving MDs for over 10 years. Toll-free (800) 241-6905.

June 18, 1983

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Continuing Medical Education Department of
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MISCELLANEOUS—CONT'D

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SUMMER CME CRUISE/CONFERENCES on Legal-Medical issues—Alaskan, Caribbean, Mediterranean. 10 & 14 days in July and August. Approved for 24 CME Cat. 1 credits (AMA/PRA). Distinguished professors. Fly roundtrip free on Caribbean and Alaskan cruises. Excellent group fares on finest ships. Registration limited. Scheduled prior to 12/31/80—Tax deductible under 1976 Tax Reform Act. Information: International Conferences, 189 Lodge Ave., Huntington Station, N.Y. 11746. (516) 549-0869.

HOLTER MONITOR SCANNING SERVICE. High quality, prompt service. First cassette free. $35 for 24-hr. scan. Three-year lease available on Holter Monitors. Call for information and free mailers. DCG interpretation, (313) 879-8860.

ALCOHOLISM, DRUG ADDICTION, SMOKING. New effective outpatient treatment. Preventing withdrawal symptoms. Complete privacy guaranteed. Courtesy fees for physicians. Call: Adam Lewenberg, M.D., 527 Madison Ave., entry from 54th St., (212) 688-0813 or (212) 671-6100.

UPDATE YOUR MEDICINE 1983. June 6–10, 1983. Association of Practicing Physicians of the New York Hospital and Cornell University Medical College. 36 hours Category I credit, a one week review of all subspecialties of internal medicine. 8 major review lectures, 12 workshops, 2 Meet the Professor luncheons, optional practical workshop in breast/pelvic examination. Held at New York Hospital-Cornell, 1300 York Avenue at 69th Street, New York. Dr. Lila Wallis is Course Director. Information: Office of CME, (212) 472-5600.

Research Project in

The Treatment of Trigeminal Neuralgia With Chinese Acupuncture Techniques

Any doctor who can refer trigeminal neuralgia patients for whom medications and surgery have brought no significant improvement, please contact:

Ling Sun Chu, M.D.
107 East 73rd St., New York, N.Y. 10021
(212) 472-3000

Acupuncture treatments will be free of charge to the patient if patient brings letter from referring physician that: 1) Contains patient's medical records. 2) Stating that: a) Referring physician agrees to participate in project, by evaluating the effects of the treatment on patient. b) Patient will remain under referring physician's care. Call or write for further details.

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ALKALOL is an aqueous solution containing essential oils and salts. It is a mucus solvent. Used with an ALKALOL NASAL DOUCHE CUP it is indicated for Acute Rhinitis, Post Nasal Drip, Chronic Sinusitis and General Cleanliness.

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Taunton, Mass. 02780

MISCELLANEOUS—CONT'D

COLLECTIONS—HARD TO COLLECT and past due accounts successfully and tactfully collected by experienced attorney. Call or write for additional information: Edward D. Gewirtz, Attorney-at-Law, 123 Grove Avenue—Suite 204, Cedarhurst, New York 11516. (516) 295-1202 or (212) 471-4044.

BILLINKOFF LEWIS & GOULD. Architecture and planning services for medical offices. Analysis of space requirements; evaluation of alternative office locations; development of design alternatives; preparation of construction drawings; construction coordination. Experienced in new construction and interior renovation. (212) 807-6588.

101 BASIC IDEAS TO IMPROVE Your Practice—Sensible, practical, usable advice achieves results by better rapport with patients and colleagues. Bonus supplement included featuring actual letter samples designed to graciously, tactfully, efficiently reach out and leave a good impression. Complete booklet, postpaid, $6.50. Irisart, 3616 Dover, Birmingham, Ala. 35223.

TAX ATTORNEY AND PENSION PLAN Specialist—Former IRS pension plan specialist and revenue agent—TEFRA amendments, pension and profit sharing plan annual administration including initial IRS qualification, annual filings, actuarial certification and employee statements of participation—partnership agreements and professional incorporation—No insurance required—references upon request—Jack Wachstock, PC, 3000 Marcus Ave., Lake Success, N.Y. 11530 (516) 437-4848.

ATTORNEY, REGULATORY, ROBERT S. ASHER, former Director of Professional Conduct, New York State Board of Regents, advanced degree in the health care area, experienced in professional and health matters, concentrating on all areas of professional practice including representation before governmental agencies on discipline, licensure, narcotic control violations, Medicaid and Medicare proceedings and in your professional business practice. Robert S. Asher, Esq., 220 E. 42nd Street, New York, NY 10017, (212) 922-1900.

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No Charge For This Service

Nassau School For Medical And Dental Assistants

W. Hempstead (516) 483-0577

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Emergency Medicine Positions—available with emergency physician group in PA, NY, NJ, VA, WVA, MD, KY and throughout New England, the Southeast, the Midwest, including all suburban, rural and metropolitan areas. Fee-for-service with minimum guarantee provided. Malpractice paid. Practice credits toward board certification. Physician department directors also desired. Please send resume to: NEEMA Emergency Medical, Suite 400, 399 Market Street, Phila., PA 19106 or phone 215-925-3511 in PA, or 800-523-0776 outside PA.

EQUIPMENT

PICKER C-3000 Cobalt^{60} Unit available. Output at 70CM is 50 rads for 10CM^2 field. Tel: (212) 271-0454.

USED EKG MACHINES—Limited amount. 3-channel with cart $1600.00, 3-channel desk top $1200.00, 1-channel portable $850.00. MAC-I's—new $7200.00; used $6400.00. 24-hr Holter recorders, printers. Call Arvid Hagg (312) 884-5961.

PRACTICES WANTED

PHYSICIAN DESIRES WORK WITH another physician or group, possibility buying into practice. Training 1½ years general surgery, 1 year urology, and 1 year internal medicine. (212) 338-6069 or (212) 381-9210.

OPHTHALMOLOGIST—Experienced ophthalmic surgeon with cornea-external disease fellowship and Ivy League background. Have practiced general medical and surgical ophthalmology. Seeking association leading to practice, group or purchase in Conn., N.J. or N.Y. area. Timothy Sullivan, M.D., 38 E. Brinkerhoff Ave., Palisades Park, N.J. 07650. (201) 944-3228.

OPHTHALMOLOGIST, BOARD CERTIFIED desires to purchase practice in the New York City or suburban area. Confidence Maintained. Please contact Dept. 168, c/o NYSJM.

REAL ESTATE FOR SALE OR RENT

MANHATTAN'S EAST SIDE, 133 EAST 73RD ST., N.Y.C. LEXINGTON Professional Center, Inc. Part time & full time medical, dental, psychiatric office suites. Furnished & equipped. 24 hour answering service; receptionist. Mail service; cleaning. X-ray & clinical laboratory on premises. No leases necessary. Rent by the hour or full-time. (212) 861-9000.

IF YOU OWN A MEDICAL BUILDING conversion to Professional Condominium gives you tremendous after-tax profits while controlling ownership of your office location. Learn how you can profit from our concept. Contact: Paul Gellert Gelco Associates, 155 West 68th Street, New York, N.Y. 10023. Phone: (212) 223-1130.

AT KINGS PLAZA BROOKLYN (Flatbush Ave. and Ave. U). Space available in prestigious luxury medical building—nine hundred (900) sq. ft. of ideally laid out functional office space with public transportation to the front door from any location in Brooklyn, convenient parking, computerized axial tomography (cat scanner) and radiology lab within walking distance. Excellent patient referrals from large general medicine practice within the building. Call owner (212) 287-5013 or (212) 338-0400.

500–2,000 SQ. FT. NEWLY CREATED offices; street level; some with private entrance; upper Manhattan opposite Columbia Presbyterian Medical Center. Reasonable. Rent. R. Paley (212) 652-2660.

SCARSDALE-RUSTIC BRICK CAPE with slate roof, in-ground pool and ⅞-acre landscaped, 3 bedrooms, 2 baths. Edgemont schools. $175,000. Principals only. (914) 472-2543.

FOR SALE: NEED A TAX BREAK???? 640 acres farm land. Level, all tillable, heavy soil, high producing. Over $500,000 worth of buildings on home quarter to depreciate. Sold as unit or individual quarters. Cash or C.D. South central Minnesota. Phone: (612) 394-2329.

MEDICAL OFFICES FOR RENT. Furnished fully. Equipment X-ray, etc. Full time—part time. Great Neck, Long Island. Immediately available. Call (516) 482-7632.

FOR SALE: LONG ISLAND, Franklin Square-West Hempstead—5 bedroom house with attached office (separate entrance). Central air-conditioning; finished basement. Call owner (516) 481-3660.

OFFICE FOR RENT: GENERAL PRACTITIONER—Family Medicine only. To include 4 treatment rooms, 1 lab., 1 waiting room, 1 reception room, 1 private bath with shower, 1 patient bath, private entry, handicap ramp, ample parking. Near busy thoroughfare, minutes to Community Hospital, excellent growth location, northern Westchester, Town of Cortlandt, Oregon Road. Call (914) 528-6700.

what goes on IN CONTINUING MEDICAL EDUCATION

NEW YORK STATE **MAY 1983**

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Please send information to the Editor, WHAT GOES ON,
420 Lakeville Road, Lake Success, New York 11042
Telephone 516-488-6100.

Compiled by the Division of Scientific Activities
George J. Lawrence, Jr., M.D., Director
Mrs. Tina Koty, Editor
Philip Keating, Director, Division of Finance

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NEW YORK

Long Island Jewish-Hillside Medical Center, The Dept. of Surgery

New Hyde Park, NY 11042
* The New York Hilton at Rockefeller Center, NYC
May 19, 1983—Thursday—7:30 AM–5:00 PM
May 20, 1983—Friday—7:30 AM–5:30 PM
VASCULAR SURGERY 1983
John B. Chang, M.D.
FEE: $300. CREDIT: CME Cat. 1 (20 Hrs.)
For further information contact Ann J. Boehme, L.I.J Medical Ctr. Tel: 212/470-2114.

Saint Mary's Hospital of Brooklyn Department of Medicine

170 Buffalo Avenue, Brooklyn, NY 11213
* Third Floor—Board Room
May 4, 1983—Wednesday—8:00 AM–9:00 AM
RHEUMATOID ARTHRITIS, CURRENT STATUS
Harry Spiera, M.D.
CREDIT: Cat. 1
May 11, 1983—Wednesday—8:00 AM–9:00 AM
ANEMIAS REVISITED
Emil Popescu, M.D.
May 18, 1983—Wednesday—8:00 am–9:00 am
GOUT
Herbert Diamond, M.D.
May 25, 1983—Wednesday—8:00 AM–9:00 AM
PROSTOGLANDIS AND NON STEROIDOL INFLAMMATORY AGENTS IN TREATMENT OF RHEUMATOID ARTHRITIS
Thomas Kantor, M.D.
For further information contact the Department of Medicine at St. Mary's Hospital. Tel: 774-3600 ext. 2044 or 2045.

Cornell University Medical College, Sponsored by the Amer. College of Radiology's Committee on Mammography under the Commission on Diagnostic Radiology

1300 York Ave., New York, NY 10021
* Uris Auditorium, Cornell University, NYC
May 14, 1983—Saturday—8:00 AM–1:00 PM
WORKSHOP ON MAMMOGRAPHY
Robert McLelland, M.D., Wende W. Logan, M.D.
CREDIT: CME Cat. 1 (5 hrs.)
For further information contact Wende W. Logan, M.D., Tel: 716/275-4335.

Doctors Hospital

170 East End Avenue
New York, NY 10028
May 5, 1983—Thursday—4:15 PM
CARDIOVASCULAR DISEASES IN CLINICAL PRACTICE
THROMBOEMBOLISM
Stanford Wessler, M.D.
CREDIT: AMA Cat. 1 (1½ Hrs.)
May 21, 1983—Saturday—9:00 AM–12:30 PM
CLINICAL SYMPOSIA
DISORDERS OF THE LARGE ARTERIES
Jere Lord, M.D.
CREDIT: AMA Cat. 1 (3 Hrs.)
For further information contact the Secretary of CME. Tel: 212/870-9118.

Maimonides Medical Center-Maimonides Hospital

4802 Tenth Avenue
Brooklyn, NY 11219
* Harley Hotel, NYC
May 15, 1983—Sunday
TWENTY-SECOND ANNUAL PEDIATRIC POSTGRADUATE SEMINAR
GASTROENTERITIS
For further information contact Mrs. Shirley Lasky, Maimonides Medical Center. Tel: 212/270-7679.

NYU Medical Center Post-Graduate Medical School & The Office of Chief Medical Examiner, City of NY

550 Fifth Avenue, NY 10016
*Lecture Hall & Autopsy Room, Milton Helpern Institute of Forensic Medicine, NYU Med. Ctr., NYC
May 6 & 7, 1983—Friday & Saturday
THE MEDICOLEGAL AUTOPSY
Elliot M. Gross, M.D.
FEE: $260 CREDIT: AMA Cat. 1 (13 Hrs.)
For further information contact NYU Post-Graduate Medical School. Tel: 212/340-5295.

The Page and William Black Postgraduate School of Medicine of the Mount Sinai School of Medicine (CUNY)

One Gustave L. Levy Place, NY 10029
* Mount Sinai Medical Center
May 21, 1983—9:00 AM—4:00 PM
ORTHOPAEDICS PM 283—THE SATURDAY MORNING GRAND ORTHOPAEDICS SYMPOSIA
Victor H. Frankel, M.D.
CREDIT: AMA Cat. 1
May 20, 21, 1983—(Friday)—9:00 AM–5:00 PM (Saturday)—9:00 AM–1:00 PM
INDIRECT OPHTHALMOSCOPY AND PERIPHERAL RETINAL DISORDERS
Keith M. Zinn, M.D.
CREDIT: AMA Cat. 1 (10.5 Hrs.). FEE: $150.
May 5, 6, 1983—8:30 AM–5:00 PM
PEDIATRIC AND ADOLESCENT GYNECOLOGY
Albert Altchek, M.D.
FEE: $150. CREDIT: AMA Cat. 1 (14 Hrs.)
May 16–20, 1983—
AMERICAN COLLEGE OF CARDIOLOGY CONSULTANTS COURSE
Drs. E. Donoso, S. Dack, R. Gorlin, L. Teichholz
CREDIT: AMA Cat. 1
May 7, 1983—9:00 AM—5:00 PM
INTER-PERITONEAL ENDOSCOPY, PERITONEOSCOPY-LAPAROSCOPY
Michael Bayer, M.D., Martin S. Goldstein, M.D.
FEE: $150. CREDIT: AMA Cat. 1 (6.5 Hrs.)
* Barbizon Plaza Hotel, Ave. of the Americas at 59 St., NYC
May 25–28, 1983—(Wed.–Fri.)—9:00 AM–5:00 PM (Saturday)—9:00 AM–Noon
SKELETAL RADIOLOGY
Alex Norman, M.D.
FEE: $380. CREDIT: AMA Cat. 1 (22 Hrs.)
* Stern Auditorium, Annenberg Building
May 3, 1983—5:00 PM–6:30 PM
"THE ARMS RACE AND THE HUMAN RACE"
Rev. William Sloane Coffin, Jr.
May 10, 1983—5:00 PM–6:30 PM
"WHAT HEALTH PROFESSIONALS NEED TO DO TO HELP PREVENT NUCLEAR WAR"
CREDIT: AMA Cat. 1 (3 Hrs.)

SUNY Downstate Medical Center, Kings County Hospital Center in cooperation with District 1, NYSSA

Department of Anesthesiology

450 Clarkson Avenue, Brooklyn, NY 11203

May 10, 1983—8:00 PM–9:00 PM

VISITING PROFESSOR PROGRAM INVASIVE MONITORING: COSTS VERSUS BENEFITS

May 11, 1983—4:00 PM–5:00 PM

AIR EMBOLISM: NEW TWISTS TO AN OLD PROBLEM

Robert E. Bedford, M.D.

CREDIT: AMA Cat. 1

For further information contact I. Raskob, M.D., SUNY Downstate Medical Center. Tel: 212/270-1233.

The Jewish Hospital and Medical Center of Brooklyn in association with the American Cancer Society, New York Division, Brooklyn Unit, SUNY, Downstate Medical Center, Sponsored by the Division of Hematology/Oncology

555 Prospect Place, Brooklyn, NY 11238

* Louria Auditorium

May 4, 1983—Wednesday—9:00 AM–5:00 PM

ADVANCES IN HEMATOLOGY AND ONCOLOGY AMER. CANCER SOCIETY: PSYCHOLOGICAL PERSPECTIVES IN THE TREATMENT OF CANCER, II

Robert Benedek, Ph.D.

* B-51 Conference Room, Basement, Leviton Bldg.

May 11, 1983—Wednesday—3:30 PM–4:30 PM

CLINICAL APPLICATION OF REGULATORY FACTORS IN CHRONIC MYELOGENOUS LEUKEMIA

Richard Silver, M.D.

For further information contact the Jewish Hospital and Medical Center of Brooklyn. Tel: 212/240-1211.

Albert Einstein College of Medicine of Yeshiva University, Dept. of Surgery

1300 Morris Park Avenue
Bronx, NY 10461

* Van Etten Hospital—Room 523

May 6, 1983—4:00 PM–5:30 PM

ONCOLOGY FOR THE FAMILY PRACTITIONER ADJUVANT THERAPY IN BREAST CANCER

Dr. H. Volk

May 20, 1983—4:00 PM–5:30 PM

POSITIVE FINDINGS ON PELVIC EXAMINATION

Dr. H. Schulman

CREDIT: AAFP Cat. 1

For further information contact Margot L. Wulf. Tel: 212/430-2000.

The Ophthalmological Foundation of America, Inc.

823 United Nations Plaza, NY 10017

May 19–21, 1983—Begins Thursday at 5:00 PM

SURGICAL COURSES IN LENS IMPLANTATION

Miles A. Galin, M.D.

For further information contact Mrs. Ruth Green, Admin. Tel: 212/470-2114.

The Skin Cancer Foundation

475 Park Avenue South, NY 10016

* Grand Hyatt Hotel, NYC

May 18–20, 1983—Wednesday to Friday

FIRST WORLD CONGRESS ON CANCERS OF THE SKIN

Drs. Perry Robins, Alfred W. Kopf, A. Bernard Ackerman

FEE: $300. CREDIT: Cat. 1 (19 Hrs.)

For further information contact Mitzi Moulds, The Skin Cancer Foundation. Tel: 212/725-5176.

NYU Medical Center Post-Graduate Medical School

550 First Avenue, New York, NY 10016

* Alumni Hall

May 19 to 21, 1983—Thursday to Saturday

FIFTH ANNUAL SCHOOL ON ALCOHOLISM FOR PHYSICIANS AND RELATED HEALTH PROFESSIONALS

Nicholas A. Pace, M.D. & Ross Fishman, Ph.D.

FEE: $185. CREDIT: AMA Cat. 1 (17 Hrs.) & AAFP

May 19 to 22, 1983—Thursday to Sunday

PRACTICAL MANAGEMENT OF GYNECOLOGIC ENDOCRINE DISORDERS AND INFERTILITY

John R. Quagliarello, M.D. & Gerson Weiss, M.D.

FEE: $370. CREDIT: AMA Cat. 1 (16.5 Hrs.)

For further information contact NYU Post-Graduate Medical School. Tel: 212/340-5295.

Kingsbrook Jewish Medical Center Co-sponsored by the Office of CME of the SUNY Downstate Medical Center, The Department of Long-Term Care Medicine

Rutland Road & East 49th St., Brooklyn, NY 11203

* Lillian Minkin Briger Ballroom of the Levitron Pavilion

May 17, 1983—Tuesday

SIXTH ANNUAL GERIATRIC MEDICINE SEMINAR "CRITICAL CARE MANAGEMENT IN THE GERIATRIC PATIENT"

Mohammad Zahir, M.D., Morris Kleinfeld, M.D.

FEE: $50. CREDIT: AMA Cat. 1

For further information contact Morris Kleinfeld, M.D., Kingsbrook Jewish Medical Center. Tel: 212/756-9700.

Metropolitan Jewish Geriatric Center Sponsored by Dept. of Medicine & the Institute for the Study of the Aging & Long Term Care

4915 Tenth Avenue, Brooklyn, NY 11219

* Goodstein Auditorium

May 25, 1983—Wednesday—12:30 PM–4:45 PM

SEMINAR IN GERIATRIC MEDICINE

CREDIT: CME Cat. 1

For further information contact Harvey C. Shapiro, M.D., Metropolitan Jewish Geriatric Center. Tel: 212/853-2800 X313.

The New York Academy of Sciences

2 East 63rd St., New York, NY 10021

* Barbizon-Plaza Hotel, NYC

May 11–13, 1983

TIMING AND TIME PERCEPTION

May 18–20, 1983

BRIDGE TO THE FUTURE: A SYMPOSIUM COMMEMORATING THE CENTENNIAL OF THE BROOKLYN BRIDGE

For further information contact Conference Director, The N.Y. Academy of Sciences, 2 E. 63 St. NYC 10021.

Beth Israel Medical Center Co-Sponsored by The Page & William Black Post-Graduate School of the Mount Sinai School of Medicine, CUNY

10 Nathan D. Perlman Place, NY 10003

* Podell Auditorium

May 6, 1983—Friday—9:00 AM–1:15 PM

MANAGEMENT OF STROKE: MEDICAL, NEUROLOGICAL AND REHABILITATION ASPECTS

Drs. Stefan Shanzer & Marius Focseneanu

FEE: $25.00. CREDIT: AMA Cat. 1 (3.75 Hrs.)

For further information contact Kathy R. Bonomo, Beth Israel Medical Center. Tel: 212/420-2000.

American Federation for Aging Research (AFAR), Inc.

11 East 44th Street, NY 10017
* Roosevelt Hotel, NYC
May 13–14, 1983
FOURTH ANNUAL MEETING OF THE AMERICAN FEDERATION FOR AGING RESEARCH
FEE: $50.00
For further information contact Ellen Orbach, Amer. Federation for Aging Research. Tel: 212/692-9433.

QUEENS COUNTY

Long Island Jewish-Hillside Medical Center/ Queens Hospital Center Affiliation Department of Psychiatry

82-68 164th Street
Jamaica, NY 11432
* School of Nursing, Queens Hospital Center
May 6, 1983—Friday—11:00 AM–12:00 NOON
BIOLOGICAL MARKERS & SEPARATION ANXIETY DISORDER
William Cox, M.D.
May 13, 1983—Friday—11:00 AM–12:00 NOON
OBSERVATIONS ON THE ACCULTURATION PROCESS BY AN ALIEN ALIENIST
Hong Cho, M.D.
May 20, 1983—Friday—11:00 AM–12:00 NOON
PROBLEMS IN PSYCHOTHERAPY WITH ADOLESCENTS
Michael Kalogerakis, M.D.
May 27, 1983—Friday—11:00 AM–12:00 NOON
THE PUBLIC PSYCHIATRIC HOSPITAL
Walter J. Tardy, M.D.
CREDIT: AMA Cat. 1
For further information contact Philip E. Levine, M.D., Dept. of Psychiatry. Tel: 212/990-3551.

Long Island Jewish-Hillside Medical Center/ Queens Hospital Center Affiliation, The Postgraduate Institute for Medical and Dental Education and the Health Sciences Center SUNY at Stony Brook Department of Medicine

New Hyde Park, NY
* Nursing School Auditorium—Queens Hospital Center 82–68 164th Street, Jamaica, NY
May 4, 1983—Wednesday—11:00 AM—12:00 NOON
PATHOGENESIS AND MANAGEMENT OF HEMOPTYSIS
Christine Wollschlager, M.D.
May 11, 1983—Wednesday—11:00 AM–12:00 NOON
CURRENT TRENDS IN MANAGEMENT OF OSTEOSARCOMA
Engracio Cortes, M.D.
May 18, 1983—Wednesday—11:00 AM–12:00 NOON
HYPERTENSION
Edward Meilman, M.D.
May 25, 1983—Wednesday—11:00 AM–12:00 NOON
MANAGEMENT OF RESISTANT ARTHRITIS
Israeli Jaffe, M.D.
For further information contact Herbert Diamond, M.D., Dept. of Medicine, Long Island Jewish-Hillside Medical Center, New Hyde Park, NY

Flushing Hospital and Medical Center

4500 Parsons Blvd.
Flushing, NY 11355
May 15, 1983—Sunday—9:00 AM–1:00 PM
SECOND ANNUAL REVIEW IN INTERNAL MEDICINE RHEUMATOLOGY
Peter Barland, M.D.
FEE: Per session: $50.00 FH&MC Staff Members
$60.00 Non-Staff Members
CREDIT: AMA Cat. 1
Department of Medicine
May 3, 1983—Tuesday—10:30 AM–12:00 NOON
GRAND ROUNDS—THE FAILING HEART
Edmund Sonnenblick, M.D.
May 10, 1983—Tuesday—9:00 AM–12:00 NOON
GRAND ROUNDS—3 HOUR HYPERTENSION SYMPOSIUM
PATHOPHYSIOLOGY OF THE RAA SYSTEM & PHARMACOLOGIC AGENTS
NEWER APPROACHES TO THE THERAPY OF THE HYPERTENSIVE
THE DIFFICULT HYPERTENSIVE
Thomas Pickering, M.D., David Lowenthal, M.D., Jerome Porush, M.D.
May 17, 1983—Tuesday—10:30 AM–12:00 NOON
GRAND ROUNDS—WHAT A PRIMARY PHYSICIAN SHOULD KNOW ABOUT SOLID TUMORS: A POT-POURRI OF CLINICAL PEARLS
Franco Muggia, M.D.
May 24, 1983—Tuesday—10:30 AM–12:00 Noon
GRAND ROUNDS—IMMUNOLOGIC LUNG DISEASE
Ronald Crystal, M.D.
CREDIT: AMA Cat. 1
For further information contact Luisa T. Gonzalez, Flushing Hospital & Medical Ctr. Tel: 212/670-5741.

The Jamaica Hospital

89th Avenue & Van Wyck Expressway
Jamaica, NY 11418
* Community Room
May 12, 1983—8:30 PM–9:30 AM
CARDIOLOGY—POST MYOCARDIAL INFARCTION SYNDROME
Alan Lyon, M.D.
May 26, 1983—8:30 AM–9:30 AM
THROMBOLYTIC THERAPY IN MYOCARDIAL INFARCTION
Peter Rentrop, M.D.
May 3, 1983—8:30 AM–9:30 AM
ENDOCRINOLOGY & METABOLISM CALCIUM METABOLISM, PART I
Lawrence Rosman, M.D.
May 31, 1983—8:30 AM–9:30 AM
CALCIUM METABOLISM, PART II
Lawrence Rosman, M.D.
* Trump Pavilion
May 18, 1983—9:00 AM–10:30 AM
DIAGNOSIS AND MANAGEMENT OF THE DIABETIC PATIENT
Sheldon J. Bleicher, M.D.
* Community Room
May 6, 1983—8:30 AM–9:30 AM
MEDICAL GASTROENTEROLOGY
CANCER OF THE STOMACH
Charles Lightdale, M.D.
May 20, 1983—8:30 AM–9:30 AM
CARCINOMA OF AMPULLARY REGION AND PANCREAS: THE ROLE OF RADIOTHERAPY
Stephen Alderman, M.D.
May 27, 1983—8:30 AM–9:30 AM
DISEASES OF THE LIVER, PART IV
Fenton Schaffner, M.D.
* Trump Pavilion
May 11, 1983—9:00 AM–10:30 AM
A CRITICAL REVIEW OF THE MOST PERTINENT GASTROENTEROLOGY LITERATURE OF THE PAST TEN YEARS
Arthur E. Lindner, M.D.
* Assembly Room
May 6, 1983—12:30 PM
THE SAGA OF PANCREATITIS
Jack Farman, M.D.

* Community Room
May 10, 1983—8:30 AM–9:30 AM
HEMATOLOGY
CURABILITY OF ACUTE LEUKEMIA
Delfino M. Crescenzo, M.D.
May 5, 1983—8:30 AM–9:30 AM
INFECTIOUS DISEASES
VENEREAL DISEASE
Robert H. Lapin, M.D.
* Trump Pavilion
May 25, 1983—9:00 AM–10:30 AM
ANTIBIOTIC UPDATE
Paul B. Iannini, M.D.
* Trump Pavilion
May 4, 1983—9:00 AM–10:30 AM
MEDICAL GRAND ROUNDS & PROGRESS IN MEDICINE
COST EFFECTIVE SELECTION OF DIAGNOSTIC PROCEDURES
David Faegenburg
* Community Room
May 24, 1983—8:30 AM–9:30 AM
NEPHROLOGY
DIALYSIS AND TRANSPLANTATION: CURRENT STATUS
Emmanuel B. Masih, M.D.
May 17, 1983—8:30 AM–9:30 AM
NEUROLOGY
ASPECTS OF MOVEMENT DISORDERS
Bertel Bruun, M.D.
May 13, 1983—8:30 AM–9:30 AM
ONCOLOGY
RECEPTORS AND TUMOR MARKERS
David Wollner, M.D.
* Assembly Room
May 27, 1983—12:30 PM–1:30 PM
PATHOLOGY GRAND ROUNDS
PATHOLOGY OF RHEUMATIC HEART DISEASE
George E. Murphy, M.D.
May 23, 1983—12:30 PM–1:30 PM
OTOLARYNGOLOGY
OFFICE OTOLARYNGOLOGY
Ali Agarabi, M.D.
May 2, 1983—12:30 PM–1:30 PM
PSYCHIATRY
PAIN, PLACEBO AND ANALGESIA
Howard E. Berk, M.D.
May 9, 1983—12:30 PM–1:30 PM
CONFIDENTIALITY, INFORMED CONSENT AND SOME OTHER FORENSIC ISSUES IN OFFICE & HOSPITAL PRACTICE
Stanley Brodsky, M.D.
May 16, 1983—12:30 PM–1:30 PM
DO I NEED TO MAKE A PSYCHIATRIC REFERRAL?
Lester I. Abend, M.D.
* Community Room
May 19, 1983—8:30 PM–9:30 AM
RHEUMATOLOGY
JUVENILE RHEUMATOID ARTHRITIS
Robert A. Rosenberg, M.D.
For further information contact The Jamaica Hospital. Tel: 212/657-1800.
* Trump Pavilion
May 25, 1983—Wednesday
14TH ANNUAL COMMUNITY SYMPOSIUM "BEHAVIORAL DISORDERS—ORGANIC, EMOTIONAL AND SOCIOENVIRONMENTAL"
For further information contact Evelyn R. Barkin, Dept. of Pediatrics. Tel: 212/657-1800.

NASSAU COUNTY

M.E.D. Communications

655 Florida Grove Road
Hopelawn, New Jersey 08861
* Auditorium in Flushing Hospital, Flushing, NY
May 3, 1983—Tuesday—9:30 AM–12:00 NOON
CARDIOVASCULAR DISEASE: RISK-REDUCTION STRATEGIES GRAND ROUNDS
CREDIT: AMA Cat. 1
For further information contact Luisa Gonzalez, Coordinator of CME, Flushing Hospital. Tel: 212/670-5741.

Long Island Jewish-Hillside Medical Center

The Department of Ophthalmology, New Hyde Park, NY 11042
* Long Island Jewish-Hillside Medical Teaching Center
May 18, 1983—8:00 AM–4:00 PM
PEDIATRIC OPHTHALMOLOGY
James T. Flynn, M.D., Eugene Helveston, M.D., Craig Hoyt, M.D.
For further information contact Ann J. Boehme, Continuing Education Coordinator. Tel: 212-470-2114.

Hempstead General Hospital

800 Front Street
Hempstead, NY 11551
* Hospital Dining Room
May 11, 1983—Wednesday—7:00 PM
ENT Emergencies
Michael Princer, M.D.
May 11, 1983—Wednesday—8:00 PM
OPHTHALMOLOGICAL EMERGENCIES
William Kasper, M.D.
CREDIT: CME Cat. 1 (2 Hrs.)
For further information contact Valerie Roessner. Tel: 516/560-1216.

The Page and William Black Postgraduate School of Medicine of the Mount Sinai School of Medicine (CUNY)

One Gustave L. Levy Place, NY 10029
* Long Beach Memorial Hospital
May 10, 1983—Tuesday—4:00 PM—6:00 PM
MOUNT SINAI TEACHING DAYS
SEXUALLY TRANSMITTED DISEASES
Yehudi M. Felman, M.D.
CREDIT: AMA Cat. 1

Nassau County Medical Center Department of Medicine

2201 Hempstead Turnpike
East Meadow, NY 11554
May 5, 1983—Thursday—10:00 AM
BETA ADRENERGIC BLOCKADE THERAPY IN 1983: UPDATE
William Frishman, M.D.
May 12, 1983—Thursday—10:00 AM
PARKINSONISM
Richard D. Sweet, M.D.
May 19, 1983—Thursday—10:00 AM
PREVENTION AND HEALTH: AN UNRECOGNIZED PAST, A PROMISING FUTURE
David Harris, M.D.
May 26, 1983—Thursday—10:00 AM
IMMUNE HEMOLYTIC ANEMIAS
Morton Spivack, M.D.
CREDIT: AMA Cat. 1 & AAFP
For further information contact Ethel A. Ford, Nassau County Medical Center. Tel: 516/542-0123.

SUFFOLK COUNTY

Brookhaven Memorial Hospital Medical Center

101 Hospital Road

Patchogue, NY 11772
* 1st Floor Conference Room
May 3, 1983—8:00 AM-9:00 AM
PEDIATRIC CONFERENCES
STRABISMUS
Alfred Cossari, M.D.
May 6, 1983—8:00 AM-9:00 AM
CLINICAL PROBLEMS IN FAMILY MEDICINE
ENDOCRINE, NUTRITION, METABOLIC
ANOREXIA NERVOSA
Ronald Shanker, M.D.
May 13, 1983—8:00 AM-9:00 AM
SHORT STATURE
Cyril Abrams, M.D.
May 27, 1983—8:00 AM-9:00 AM
PSYCHOSOCIAL DISORDERS
SLEEP DISORDERS
Charles Pollack, M.D., Ph.D.
CREDIT: AMA Cat. 1
For further information contact Dorothy S. Lane, M.D., Brookhaven Memorial Hospital. Tel: 516/654-7795.

SUNY at Stony Brook, Dept. of Pathology School of Medicine

Stony Brook, NY 11794
* Health Sciences Center
May 13, 14, 1983—Friday & Saturday
MEMBRANE MARKERS USED IN DIAGNOSIS OF LYMPHOMA AND LEUKEMIA
FEE: $90. CREDIT: Cat. 1 (10 Hrs.)
For further information contact Tamarath K. Yolles, M.D. Tel: 516/444-2094.

WESTCHESTER COUNTY

White Plains Hospital Medical Center
Davis Avenue at East Post Road
White Plains, NY 10601

May 4, 1983—Wednesday—8:30 AM
HEMATOLOGY DAY
For further information contact Toni Calabrese Boelsen. Tel: 914/681-1118.

Peekskill Community Hospital

980 Crompond Road
Peekskill, NY 10566
* Inservice Education Classrooms
May 11, 1983—9:00 AM-3:00 PM
UPDATE ON PEDIATRIC INFECTIOUS DISEASES CREDIT: CME (6 Hrs.)
For further information Elaine Hynes. Tel: 914/737-9000.

The Mental Health Association of Westchester County, Inc. Co-sponsored by Rockland Psychiatric Center

* Academic Arts Building, Weschester Community College, Valhalla, N.Y.
May 18, 1983—Wednesday
"MENTAL HEALTH ISSUES IN THE NURSING AND ADULT HOME: A TEAM APPROACH TO RESIDENTS' NEEDS"
Charles A. Shamoian, M.D.
CREDIT: AMA Cat. 1 (4 Hrs.)
For further information contact Helen Kramer, The Mental Health Assoc. Tel: 914/949-6741.

DUTCHESS COUNTY

Harlem Valley Psychiatric Center
New York Medical College

Wingdale, NY 12594
May 13, 1983—10:00 AM-11:30 AM
CONTEMPORARY ISSUES IN PSYCHIATRY
TARDIVE DYSKINESIA
Sukdev Muhkerjee, M.D.
May 20, 1983—10:00 AM-11:30 AM
FORENSIC PSYCHIATRY—COMMITMENT, CAPACITY AND RECENT DEVELOPMENTS
Edward Allen, M.D.
May 27, 1983—10:00 AM-11:30 AM
SEXUAL DISORDERS AND SEX THERAPY
Marion Brancucci, M.D.
For further information contact Beth H. Davies, R.N. Tel: 914/832-6611.

OTSEGO COUNTY

The Mary Imogene Bassett Hospital Sponsored by A. O. Fox Memorial

Cooperstown, NY 13326
*Anderson Auditorium, Hartwick College Oneonta, New York
May 19, 1983—12:30 PM-4:00 PM
CARDIOLOGY TEACHING DAY
CREDIT: AMA Cat. 1 (3 Hrs.)
For further information contact Medical Education Office, Mary Imogene Bassett Hosp. Tel: 607/547-3764.

ST. LAWRENCE COUNTY

Canton-Potsdam Hospital

50 LeRoy Street
Potsdam, NY 13676
* Medical Library
May 12, 1983—Thursday-9:00 AM
ENDOSCOPIC APPROACH OF THE BILIARY TRACT
Michael Fitzgerald, M.D.
For further information contact Sebastian A. Mazzotta, M.D., Canton-Potsdam Hospital. Tel: 315/265-3300.

SULLIVAN COUNTY

The Page and William Black Postgraduate School of Medicine of the Mount Sinai School of Medicine (CUNY)

One Gustave L. Levy Place, NY 10029
* Community General Hospital of Sullivan County, Harris, NY
May 10, 1983—3:00 PM-6:00 PM
MOUNT SINAI TEACHING DAYS
PRE OPERATIVE EVALUATION OF PATIENTS
MEDICAL, NEUROLOGICAL
Samuel K. Elster, M.D.
CREDIT: AMA Cat. 1

BUFFALO

Roswell Park Memorial Institute
Dept. of Health—State of New York

666 Elm Street
Buffalo, NY 14263

May 12, 1983—Thursday
ONCOLOGY SEMINAR SERIES CLINICAL AND BASIC ASPECTS OF BREAST CANCER
Dr. Thomas Dao
May 19, 1983—Thursday
MODERN MANAGEMENT CONCEPTS IN LEUKEMIA & LYMPHOMA
Dr. Edward Henderson
FEE: $45-physicians. CREDIT: AMA Cat. 1 & AAFP
For further information contact Gayle Bersani, R.N.
Tel: 716/845-4406.

The Buffalo Academy of Medicine & Buffalo General Hospital

Box 114, Hiler Branch, Buffalo, NY 14223
* Sheraton Inn, Buffalo East
May 5, 1983—Thursday
HEART FAILURE: NEW CONCEPTS IN DIAGNOSIS & TREATMENT
CREDIT: AMA Cat. 1 (7 Hrs.)
For further information contact Gertrude Myers, Program Coordinator. Tel: 716-836-5172

SYRACUSE

SUNY Upstate Medical Center

750 East Adams St.
Syracuse, NY 13210
* Holiday Inn, University Area
Syracuse, NY
May 17, 1983—Tuesday
13TH ANNUAL POSTGRADUATE OBSTETRICS/GYNECOLOGY TEACHING DAY—"AN UPDATE IN GYNECOLOGIC SURGERY"
FEE: $90
For further information contact Program Coordinator, Office of CME. Tel: 315/473-4607.

OUT OF STATE

International Academy of Proctology

* Hotel Intercontinental, London
May 1–6, 1983
For further information contact Admn. Officer: E. W. Cantor, 271-17 V Grand Central Pkwy, Floral Pk., NY 11005.

International Workshop on the At Risk Infant

P.O. Box 29313, Tel Aviv 61292, Israel
* JERUSALEM, ISRAEL
May 22–26, 1983
INTERNATIONAL WORKSHOP ON THE "AT RISK" INFANT
For further information contact Sec: S. Harel, M.D., International Workshop on the At Risk Infant, P.O. Box 29313, Tel Aviv 61292, Israel.

International Union of Air Pollution Prevention Associations

58 Rue du Rocher, 75008 Paris, France
* PARIS, FRANCE
May 16–20, 1983
WORLD CONGRESS ON AIR QUALITY
For further information contact APPA, 58 Rue du Rocher, 75008 Paris, France.

Medical Seminars International

West Park Medical Office Building
22135 Roscoe Boulevard, Suite 104
Canoga Park, CA 91304
* London, England
May 5–15, 1983
SPRING SEMINAR IN MEDICAL IMAGING
FEE: $365. CREDIT: CME Cat. 1 (18 Hrs.)
For further information contact Secretary, Spring Seminar.
Tel: 213/340-0580, ext. 280.

American Cancer Society, Inc.

777 3rd Avenue, NYC 10017
* Boston Sheraton Hotel, Boston, MA
May 19–21, 1983
AMERICAN CANCER SOCIETY NATIONAL CONFERENCE-BREAST CANCER-1983
CREDIT: CME Cat. 1
For further information contact Nicholas G. Bottiglieri, M.D., American Cancer Society. Tel: 212/371-2900.

Educational Resources Associates, Inc. Co-Sponsored by the Division of Nuclear Medicine and Section of Cardiology, MGH, & the American Heart Association's Council on Clinical Cardiology

209 Harvard Street—Suite 500
Brookline, MA 02146
* The Registry Resort, Scottsdale, Arizona
May 9–12, 1983
CARDIAC IMAGING UPDATE—NEW MODES, NEW TECHNIQUES, NEW PRINCIPLES OF USE
Richard B. Jaffe, M.D.
FEE: $385. CREDIT: AMA Cat. 1 (24 Hrs.)
For further information contact Educational Resources Associates, P.O. Box 369, Brookline, MA 02146. Tel: 617/738-8859/8861.

American Medical Association

535 North Dearborn Street
Chicago, IL 60610
* Sheraton-Boston Hotel, Prudential Center, MA
May 12–15, 1983
HEALTH REPORTING/RADIO-TV CONFERENCE
CREDIT: CME Cat. 1
For further information contact American Medical Assoc., 535 No. Dearborn Street, Chicago, IL 60610.

American Society of Law & Medicine

765 Commonwealth Avenue
Boston, MA 02215
* Washington, DC
May 12–13, 1983
SPRING 1983 EDUCATIONAL CONFERENCES BIOLOGICAL MONITORING AND GENETIC SCREENING IN THE INDUSTRIAL WORKPLACE
For further information contact Victoria Coates, Amer. Society of Law & Medicine, 765 Commonwealth Ave., Boston, MA 02215.

The New York County Medical Society

40 West 57th Street, New York, NY 10019
* Tokyo, Japan
June 28, 29, 30, 1983
NINTH JOINT TOKYO/NEW YORK MEDICAL CONGRESS
For further information contact New York County Medical Society. Tel: 212/582-5858.

China International Meeting Services, Inc.

17 Battery Place—Suite 1223, NYC 10004
* Tianjin, China
May 15–22, 1983

INTERNATIONAL ACADEMIC SYMPOSIUM ON ORTHOPAEDICS
For further information contact Mr. Victor Minton, China International Meeting Services, Inc. Tel: 212/747-1755.

NYU Post-Graduate Medical School and the Tel Aviv Medical Center, Sackler School of Medicine Tel Aviv University

550 First Ave., New York, NY 10016
* Tel Aviv, Israel
May 21–June 1, 1983
ECHOCARDIOGRAPHY 1983—CLINICAL AND HEMODYNAMIC CORRELATIONS
FEE: $375. CREDIT: AMA Cat. 1 (22 Hrs.)
For further information contact NYU Post-Graduate Medical School. Tel: 212/340-5295.

Medical Care Development

11 Parkwood Drive
Augusta, Maine 04330
* Black Point Inn, Prout's Neck, Maine
May 22–25, 1983
SCREENING FOR DISEASE
CREDIT: AMA Cat. 1 & AAFP
For further information contact Gerald Goold or Joanne Adams. Tel: 207/622-7566.

Society of Manufacturing Engineers

One SME Drive, P.O. Box 930
Dearborn, Michigan 48121
* Adam's Mark/Philadelphia Hotel, Phila., PA
May 17–19, 1983
TABLET AND CAPSULE TECHNOLOGY: AN UPDATE
For further information contact Leonard B. Antosiak, SME. Tel: 313/271-1500.

American Society of Clinical Pathologists

2100 West Harrison Street
Chicago, Illinois 60612,
February through June—on the second Friday of each month—12:00 NOON
Month of May:
ASCP TELECONFERENCES MUSCLE PATHOLOGY
TOPICS IN CLINICAL CHEMISTRY
INFLAMMATORY NON-NEOPLASTIC DERMATOSES
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Propranolol hydrochloride is contraindicated in 1) bronchial asthma; 2) allergic rhinitis during the pollen season; 3) sinus bradycardia and greater than first degree block; 4) cardiogenic shock; 5) right ventricular failure secondary to pulmonary hypertension; 6) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol; 7) in patients on adrenergic-augmenting psychotropic drugs (including MAO inhibitors), and during the two week withdrawal period from such drugs.

WARNINGS

CARDIAC FAILURE: Sympathetic stimulation is a vital component supporting circulatory function in congestive heart failure, and inhibition with beta blockade always carries the potential hazard of further depressing myocardial contractility and precipitating cardiac failure. Propranolol acts selectively without abolishing the inotropic action of digitalis on the heart muscle (i.e., that of supporting the strength of myocardial contractions). In patients already receiving digitalis, the positive inotropic action of digitalis may be reduced by propranolol's negative inotropic effect. The effects of propranolol and digitalis are additive in depressing AV conduction.

IN PATIENTS WITHOUT A HISTORY OF CARDIAC FAILURE, continued depression of the myocardium over a period of time can, in some cases, lead to cardiac failure. In rare instances, this has been observed during propranolol therapy. Therefore, at the first sign or symptom of impending cardiac failure, patients should be fully digitalized and/or given a diuretic, and the response observed closely: a) if cardiac failure continues, despite adequate digitalization and diuretic therapy, propranolol therapy should be immediately withdrawn; b) if tachyarrhythmia is being controlled, patients should be maintained on combined therapy and the patient closely followed until threat of cardiac failure is over.

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following *abrupt* discontinuation of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease, who are given propranolol for other indications.

IN PATIENTS WITH THYROTOXICOSIS, possible deleterious effects from long-term use have not been adequately appraised. Special consideration should be given to propranolol's potential for aggravating congestive heart failure. Propranolol may mask the clinical signs of developing or continuing hyperthyroidism or complications and give a false impression of improvement. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. This is another reason for withdrawing propranolol slowly. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

IN PATIENTS UNDERGOING MAJOR SURGERY, beta blockade impairs the ability of the heart to respond to reflex stimuli. For this reason, with the exception of pheochromocytoma, propranolol should be withdrawn 48 hours prior to surgery at which time all chemical and physiologic effects are gone according to available evidence. However, in case of emergency surgery, since propranolol is a competitive inhibitor of beta-receptor agonists, its effects can be reversed by administration of such agents, e.g., isoproterenol or levarterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in restarting and maintaining the heart beat has also been reported.

IN PATIENTS PRONE TO NONALLERGIC BRONCHOSPASM (*e.g.*, CHRONIC BRONCHITIS, EMPHYSEMA), propranolol should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETICS AND PATIENTS SUBJECT TO HYPOGLYCEMIA. Because of its beta-adrenergic blocking activity, propranolol may prevent the appearance of premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia. This is especially important to keep in mind in patients with labile diabetes. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

USE IN PREGNANCY. The safe use of propranolol in human pregnancy has not been established. Use of any drug in pregnancy or women of childbearing potential requires that the possible risk to mother and/or fetus be weighed against the expected therapeutic benefit. Embryotoxic effects have been seen in animal studies at doses about 10 times the maximum recommended human dose.

PRECAUTIONS

Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if propranolol is administered. The added catecholamine-blocking action of this drug may then produce an excessive reduction of the resting sympathetic nervous activity. Occasionally, the pharmacologic activity of propranolol may produce hypotension and/or marked bradycardia resulting in vertigo, syncopal attacks, or orthostatic hypotension.

As with any new drug given over prolonged periods, laboratory parameters should be observed at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function.

ADVERSE REACTIONS

Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; arterial insufficiency, usually of the Raynaud type; thrombocytopenic purpura. *Central Nervous System:* lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia, visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. *Gastrointestinal.* nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis. *Allergic:* pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress. *Respiratory:* bronchospasm. *Hematologic:* agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura. *Miscellaneous:* reversible alopecia. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been conclusively associated with propranolol. *Clinical Laboratory Test Findings:* Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

HOW SUPPLIED

INDERAL (propranolol hydrochloride)

TABLETS

—Each hexagonal-shaped, orange, scored tablet is embossed with an "I" and imprinted with "INDERAL 10," contains **10 mg** propranolol hydrochloride, in bottles of 100 (NDC 0046-0421-81) and 1,000 (NDC 0046-0421-91). Also in unit dose package of 100 (NDC 0046-0421-99)

—Each hexagonal-shaped, blue, scored tablet is embossed with an "I" and imprinted with "INDERAL 20," contains **20 mg** propranolol hydrochloride, in bottles of 100 (NDC 0046-0422-81) and 1,000 (NDC 0046-0422-91). Also in unit dose package of 100 (NDC 0046-0422-99).

—Each hexagonal-shaped, green, scored tablet is embossed with an "I" and imprinted with "INDERAL 40," contains **40 mg** propranolol hydrochloride, in bottles of 100 (NDC 0046-0424-81) and 1,000 (NDC 0046-0424-91). Also in unit dose package of 100 (NDC 0046-0424-99).

—Each hexagonal-shaped, pink, scored tablet is embossed with an "I" and imprinted with "INDERAL 60," contains **60 mg** propranolol hydrochloride, in bottles of 100 (NDC 0046-0426-81) and 1,000 (NDC 0046-0426-91). Also in unit dose package of 100 (NDC 0046-0426-99).

—Each hexagonal-shaped, yellow, scored tablet is embossed with an "I" and imprinted with "INDERAL 80," contains **80 mg** propranolol hydrochloride, in bottles of 100 (NDC 0046-0428-81) and 1,000 (NDC 0046-0428-91). Also in unit dose package of 100 (NDC 0046-0428-99).

The appearance of these tablets is a trademark of Ayerst Laboratories.

Store at room temperature (approximately 25° C).

INJECTABLE

—Each ml contains 1 mg of propranolol hydrochloride in Water for Injection. The pH is adjusted with citric acid. Supplied as 1 ml ampuls in boxes of 10 (NDC 0046-3265-10).

Store at room temperature (approximately 25° C).

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New York, N.Y. 10017

8229/383

New York State Journal of Medicine

ORGANIZED 1807

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May 1983 Volume 83 Number 6

"Dedicated to the continuing education of the physician"

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Published monthly by the Medical Society of the State of New York

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For geriatric patients,
starting low is starting right...

the Valium® 2-mg tablet

(diazepam/Roche)

The unique advantage of "mind and muscle" actions

Of all the benzodiazepines, only Valium (diazepam/Roche) provides two distinct and clinically valuable effects—antianxiety action and, when used adjunctively, relief of skeletal muscle spasm due to local pathology. These distinctive "mind" and "muscle" actions make Valium uniquely versatile.

As a calming agent, Valium 2 mg is a particularly appropriate choice for the excessively anxious elderly patient. The 2-mg dosage strength of Valium, daily or *b.i.d.*, is usually sufficient to relieve dysfunctional anxiety and its associated somatic symptoms promptly and reliably.

And, even at low dosages, adjunctive Valium can be helpful in managing the geriatric patient with skeletal muscle spasm due to local pathology (e.g., the "low back" patient or the one with muscle "strain").

The 2-mg tablet is scored, making it easier to initiate therapy with the smallest effective amount, in order to forestall oversedation or ataxia. For most elderly or debilitated patients, 2 to 2½ mg, once or twice daily, is the recommended starting dosage, to be gradually increased or decreased as needed and tolerated.

Rapid absorption

Because of its rapid and complete absorption, Valium (diazepam/Roche) achieves peak blood levels in 60 to 90 minutes after a single dose. Patients, therefore, may experience some relief within hours after therapy begins. Absorption of Valium is not significantly affected by changes in the physiologic pH range in the GI tract. And Valium is well tolerated by most patients. Although drowsiness, ataxia and fatigue are sometimes encountered, they are rarely severe.

Unmatched history of clinical effectiveness

Through the years, hundreds of reports have been published attesting to the clinical effectiveness of Valium (diazepam/Roche). A dependable and widely trusted psychotropic, Valium has fully established its ability to relieve symptoms of excessive anxiety in a variety of clinical situations—producing the distinctive antianxiety response that clinicians know, want and expect.

Unmatched range of indications

In both office and hospital practice, only Valium (diazepam/Roche) does so much so well. One reason: Valium can claim not only clinically useful "mind and muscle" effects but anticonvulsant properties as well. The most versatile of the benzodiazepines, Valium is most widely known as a dependable anxiolytic, producing prompt relief of excessive anxiety, whether seen alone or associated with functional or organic disorders. In addition, adjunctive Valium is often an important asset in programs designed to relieve skeletal muscle spasm due to local pathology or to control certain seizure disorders.

Valium fits well into most therapeutic regimens because it is used with many primary medications, such as cardiac glycosides, diuretics, antacids, vasodilators and anticoagulants. The clearance of Valium and certain other benzodiazepines can be delayed by cimetidine administration, but the clinical significance of this is unclear. Patients should be cautioned against drinking alcohol, driving or operating machinery while taking Valium, as with all agents that act on the CNS. Periodic reassessment of the usefulness of continued therapy with Valium is recommended.

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Before prescribing, please see summary of product information on following page. ROCHE®

Valium®
(diazepam/Roche) Ⓒ IV

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).
The effectiveness of Valium in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.
Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.
The clearance of Valium and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.
Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.
Dosage: Individualize for maximum beneficial effect. *Adults:* Anxiety disorders, symptoms of anxiety, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).
How Supplied: For oral administration, Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100* and 500;* Prescription Paks of 50, available in trays of 10;* Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25,† and in boxes containing 10 strips of 10.†

*Supplied by Roche Products Inc., Manati, Puerto Rico 00701
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From the library . . .

There is a redundancy and repetition in the presentation of the literature of the research worker today. As Dr. M. M. Cummings quoted, "there is first the colloquium, then the national meeting, then the publication in a national meeting, then the publication in a national or international journal or the individual organ of a special society." As Dr. Cummings also indicated, "the same report, often, with only minor modifications, can be found in the abstract published before a meeting, the presentation at the meeting, in the progress report of the work done, in a preliminary article in *Science*, *Lancet*, or *Life Sciences*, etc., in a review article and finally as a published paper in a specialty journal. Of course, the acme is reached if the work also appears in *Medical World News* or its equivalent, with wide-spread dissemination, or if it reaches the public press by wangling a relationship to ecology, personal health and hygiene, or sex."

Something must be done about the 2 million published articles in 50,000 journals annually. Unless organized by using modern computers it yields an "overload switchboard" situation, in a stage of confusion and panic, and is incomprehensible. The poor buries the good; little gets through the overwhelmed switchboard. We are being engulfed by a raging sea of wordage, print and paper — just too many articles in too many journals. We are suffering from a diarrhea of words, crude but true even in the vernacular. The threat is that we will drown in this liquid diarrheal mess, a most uninviting prospect. As Billings' said long, long ago, "nine-tenths, at least, becomes worthless within ten years, and of no interest," a most polite way of saying so much of it is just fertilizer. Here women's lib has a point, for the reference is always to the male product!

This is mindful of the time I was asked to autopsy an elephant at the Bronx Zoo. The group of attendants gathered around and pleaded. "Doc, when an elephant has diarrhea, it's rough, but when the whole animal house has the runs it is a calamity." We did find the cause in a typhi murium infection with the source in some trapped rats. Chloromycetin stopped the diarrhea, for which the caretakers have been ever grateful.

Begging your pardon for the unesthetic implication, if the mess in the world's medical literature is ever to be cleaned up, so as to be useful and not overwhelming, the National Medical Library, with its advanced computer technology, will do it; no one else can. We must remember that we only keep adding to the medical literature; we never subtract. Lest this be misinterpreted, we are not in favor of the destruction of books, records, and journals, as the Roman legions of Caeser did to the Library of Alexandria, nor the burning debacle of Hitler. Yet we do badly need some spring "house cleaning." With the computer this could take the form of removing material from memory on-line storage on tap instantaneously, after careful consultation with recognized authorities, and placing such material in a less active file. Such an historical file could have entries in it retrieved at a more leisurely pace for scholarly study of the evolution of an idea for priority; then the remainder of material in the memory storage would be active material and always be retrieved with great rapidity for instant availability and use.

(*continued on page 806*)

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(*continued from page 804*)

ALFRED A. ANGRIST

A plea for selective library service: to bring advances in library science to the practitioner. New York State Journal of Medicine 1974; 10:2056. ■

In the past the research worker was condescendingly considered an impractical maverick, receiving scant support and little recognition. This has all changed now, for today research has both prestige and the material benefits of control of funds, equipment, technicians, travel allowances, fellowships, prizes, and awards, and preference in promotions in the academic hierarchy.[6] Hence, it follows that many teachers in medical colleges now make research their primary interest; they view teaching as a chore often in conflict with their research effort and, quite understandably, reduce their teaching to the absolute minimum. Medical colleges also promote this policy because of their emphasis on publication for the reputation of the institution.

The danger is that nonresearch functions may be affected unfavorably. Snoke[4] indicated the detrimental effect of the unbalanced emphasis on scientific investigation on individual patient care and questioned "whether medical care is as superlative in university teaching hospitals as we would expect in this 'best of medical worlds,' " and noted the further consequence of the "blind spot in our thinking due to a refusal or inability to accept responsibility for complete education of the physician." Some research workers contribute to the difficulty by disparaging the contribution of the teacher. This belittling in the "teacher's own bailiwick" diminishes the appeal of teaching and contributes to the prevailing feeling of neglect and frustration on the part of the gifted teacher in medicine.

ALFRED A. ANGRIST

Research and teaching in medical schools. *JAMA* 1960; 173:807. ■

Entities described and elucidated recently by the autopsy:

- Aldosteronism, Conn's syndrome
- Adrenal tumors with endocrine section (Cushing's syndrome)
- Atheromatous embolism
- Amniotic fluid embolism
- Asbestosis and mesothelioma
- Asymmetrical myocardial hypertrophy
- Activation of tuberculosis after steroid therapy
- Berylliosis
- Carotid artery insufficiency syndrome
- Chloride or protein-losing enteropathy
- Cerebral leukodystrophies
- Collagen diseases
- Congenital heart disease
- Congenital intestinal atresia
- Complications of new therapeutic agents: cortisone and ACTH; tetracycline liver, enteritis, etc.
- Cancer — treatment complications of chemotherapy
- Calcinosis from vitamin D
- Carotid artery thrombosis

(*continued on page 881*)

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BRIEF SUMMARY
PROCARDIA* (nifedipine) **CAPSULES** For Oral Use

INDICATIONS AND USAGE: I. Vasospastic Angina: PROCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria. 1) classical pattern of angina at rest accompanied by ST segment elevation, 2) angina or coronary artery spasm provoked by ergonovine, or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography, the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PROCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e.g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm, or when angina is refractory to nitrates and/or adequate doses of beta blockers.

II. Chronic Stable Angina (Classical Effort-Associated Angina): PROCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or organic nitrates or who cannot tolerate those agents.

In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in those patients are incomplete.

Controlled studies in small numbers of patients suggest concomitant use of PROCARDIA and beta blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs. (See Warnings.)

CONTRAINDICATIONS: Known hypersensitivity reaction to PROCARDIA.

WARNINGS: Excessive Hypotension: Although in most patients, the hypotensive effect of PROCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension. These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers.

Severe hypotension and/or increased fluid volume requirements have been reported in patients receiving PROCARDIA together with a beta blocking agent who underwent coronary artery bypass surgery using high dose fentanyl anesthesia. The interaction with high dose fentanyl appears to be due to the combination of PROCARDIA and a beta blocker, but the possibility that it may occur with PROCARDIA alone, with low doses of fentanyl, in other surgical procedures, or with other narcotic analgesics cannot be ruled out. In PROCARDIA treated patients where surgery using high dose fentanyl anesthesia is contemplated, the physician should be aware of these potential problems and, if the patient's condition permits, sufficient time (at least 36 hours) should be allowed for PROCARDIA to be washed out of the body prior to surgery.

Increased Angina: Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PROCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Beta Blocker Withdrawal: Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines. Initiation of PROCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PROCARDIA initiation. It is important to taper beta blockers if possible, rather than stopping them abruptly before beginning PROCARDIA.

Congestive Heart Failure: Rarely, patients, usually receiving a beta blocker, have developed heart failure after beginning PROCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event.

PRECAUTIONS: General: Hypotension: Because PROCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PROCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. (See Warnings.)

Peripheral edema: Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PROCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy. With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Drug interactions: Beta-adrenergic blocking agents: (See Indications and Warnings.) Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PROCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina.

Long-acting nitrates: PROCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Digitalis: Administration of PROCARDIA with digoxin increased digoxin levels in nine of twelve normal volunteers. The average increase was 45%. Another investigator found no increase in digoxin levels in thirteen patients with coronary artery disease. In an uncontrolled study of over two hundred patients with congestive heart failure during which digoxin blood levels were not measured, digitalis toxicity was not observed. Since there have been isolated reports of patients with elevated digoxin levels, it is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing PROCARDIA to avoid possible over- or under-digitalization.

Carcinogenesis, mutagenesis, impairment of fertility: When given to rats prior to mating, nifedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose.

Pregnancy: Category C. Please see full prescribing information with reference to teratogenicity in rats, embryotoxicity in rats, mice and rabbits, and abnormalities in monkeys.

ADVERSE REACTIONS: The most common adverse events include dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%. Syncopal episodes did not recur with reduction in the dose of PROCARDIA or concomitant antianginal medication. Additionally, the following have been reported: muscle cramps, nervousness, dyspnea, nasal and chest congestion, diarrhea, constipation, inflammation, joint stiffness, shakiness, sleep disturbances, blurred vision, difficulties in balance, dermatitis, pruritus, urticaria, fever, sweating, chills, and sexual difficulties. Very rarely, introduction of PROCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related. Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

Laboratory Tests: Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CPK, LDH, SGOT, and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nifedipine therapy. The relationship to PROCARDIA therapy is uncertain. These laboratory abnormalities have rarely been associated with clinical symptoms. Cholestasis, possibly due to PROCARDIA therapy, has been reported twice in the extensive world literature.

HOW SUPPLIED: Each orange, soft gelatin PROCARDIA CAPSULE contains 10 mg of nifedipine. PROCARDIA CAPSULES are supplied in bottles of 100 (NDC 0069-2600-66), 300 (NDC 0069-2600-72), and unit dose (10x10) (NDC 0069-2600-41). The capsules should be protected from light and moisture and stored at controlled room temperature 59° to 77°F (15° to 25°C) in the manufacturer's original container.

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Quotes from an unsolicited letter received by Pfizer from an angina patient.
While this patient's experience is representative of many unsolicited comments received, not all patients will respond to Procardia nor will they all respond to the same degree.

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"My daily routine consisted of sitting in my chair trying to stay alive."

"My doctor switched me to PROCARDIA[*] *as soon as it became available. The change in my condition is remarkable."*

"I shop, cook and can plant flowers again."

"I have been able to do volunteer work...and feel needed and useful once again."

PROCARDIA can mean the return to a more normal life for your patients—having fewer anginal attacks,[1] taking fewer nitroglycerin tablets,[2] doing more, and being more productive once again.

Side effects are usually mild (most frequently reported are dizziness or lightheadedness, peripheral edema, nausea, weakness, headache and flushing, each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%).

for the varied faces of angina

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* Procardia is indicated for the management of:
1) Confirmed vasospastic angina.
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Alfred A. Angrist

In December 1982, Alfred A. Angrist, M.D. retired as Editor of the *Journal*, a position he had held with great distinction since 1972.

Born in Brooklyn, New York in 1902, Dr. Angrist received his B.S. degree from the College of the City of New York in 1922 and his M.D. degree from the Long Island College of Medicine in 1926. Following graduation from medical school he did two successive years of internship, one at Bronx Hospital and another at City Hospital on Welfare Island (now Roosevelt Island). He then went on to do a year's residency in pathology at Metropolitan Hospital, which he completed in 1929.

In delivering the Twenty-Third Commencement Address at the Albert Einstein College of Medicine on May 24, 1974, Dr. Angrist told the graduates that it was a deep yearning for independence that brought him into medicine. Subsequent events in his life demonstrated how that independence, coupled with technical skills, knowledge, conscientious deduction, and a high sense of purpose led to the development of an illustrious career that influenced and shaped the lives of professional colleagues, residents, and students.

In 1929 Dr. Angrist was appointed instructor in pathology at the New York Medical College. At the same time, he undertook graduate work in clinical bacteriology and practical hematology at Columbia University's College of Physicians and Surgeons. He continued taking graduate courses at Columbia throughout the first half of the 1930s and, in addition, took courses in the ensuing years at several other institutions, including Rutgers University, the New York Eye and Ear Infirmary, McGill University, and the Polytechnic Institute of Brooklyn. In 1949, he studied exfoliative cytology at the Cornell University Medical College under George Papanicolaou, M.D., and isotopes at the Oak Ridge Institute of Nuclear Studies.

Between 1934 and 1948, Dr. Angrist was associate professor of pathology at New York Medical College. During that same period, he assumed the directorship of laboratories at the Jewish Memorial Hospital, Physician's Hospital, and Horace Harding Hospital. In 1935 he became pathologist and director of laboratories at the Queens Hospital Center, a position he held until 1954 when he became Professor and Chairman of the Department of Pathology of the Albert Einstein College of Medicine, Yeshiva University. At the same time, he became director of laboratory services at the Bronx Municipal Hospital Center.

From the 1940s on through the 1960s, Dr. Angrist served as a consultant pathologist to many institutions, including Hillside Hospital, Flushing Hospital, Creedmoor State Hospital, the United States Naval Hospital in St Albans, and Jamaica Hospital. He also served as a consulting pathologist to the District Attorney of Queens County.

Keenly interested in research, he has been an active contributor to the medical literature since the early 1930s. His special areas of interest have been endocarditis, cancer, medicolegal pathology, and gerontology. Dr. Angrist has contributed 279 papers to the medical literature, reflecting not only his research interests, but also the many difficult social and philosophical issues facing medicine.

Dr. Angrist became a Diplomate of the American Board of Pathology in 1937 and a Diplomate of the American Board of Forensic Pathology in 1960. His leadership in medicine and in his specialty was acknowledged by his election to the presidency of the Queens County Medical Society (1948–1949) and to that of the New York Pathological Society (1952–1953). For many years he served as a delegate from the Queens County Medical Society to the Medical Society of the State of New York. Active in organized medicine for several decades, he served as a member of the Committee on Medical Education of the New York Academy of Medicine and as a member of the Comitia Minora of the Queens County Medical Society. He served in many other official positions in the Queens County Medical Society, including chairman of the Public Health Committee, president of the Section on Internal Medicine and Pathology, directing librarian and member of the editorial board of the *Queens County Medical Society Bulletin*.

A Founding Fellow of the American College of Pathology, Dr. Angrist also served on the Mayor's Committee for the Aged, on the Board of Directors of the Health Insurance Plan of New York, and as a consultant of the New York City Department of Health on death certification. In addition, he has been a member of many scientific and medical societies and has been active on a number of their committees and task forces. He served as vice president of the Medical Society of the State of New York and was a member of the society's committee that produced the Standard Nomenclature of Pathology.

In 1962, Dr. Angrist was awarded the Alumni Medallion of the State University of New York, Downstate Medical Center for his outstanding achievements as a physician, teacher, and scientist. This award was presented to him at the 104th Commencement of the Center's College of Medicine. As a member of the graduating class, I was in the audience when Robert Moore, M.D., president of the Center and dean of the College of Medicine, said:

> Dr. Alfred Angrist, distinguished alumnus and physician, brilliant diagnostician, dedicated scientist, and inspiring and inspired teacher in the field of pathology; in recognition of your services to humanity and to the advancement of science, and by virtue of the authority vested in me by the faculty of the College of Medicine of the Downstate Medical Center, I cite you as a distinguished alumnus, and in token thereof, present you with this medallion and citation.

That same year he was awarded the Medal for Distinguished Service in Medicine by the Jewish Memorial Hospital. Also, a Festschrift number of the *Bulletin of the Jewish Memorial Hospital* was dedicated to him. In 1967, students and physicians at the Albert Einstein College of Medicine established the Alfred A. Angrist Alumni Association in his honor. The Association set up a fund to award annual prizes to Einstein medical students and to support summer employment in the Department of Pathology for two high-school students enrolled in Einstein's Bio Careers Program. In 1970, the Bronx Municipal Hospital Medical Center established a lectureship in his name.

Dr. Angrist retired as chairman of the department of pathology at the Albert Einstein College of Medicine in 1969, becoming chairman emeritus and professor emeritus in the department. As he had done in earlier years, he vigorously campaigned both in speaking and in writing on the importance of the autopsy both for the advancement of knowledge and for teaching.

In 1970, Yeshiva University awarded an honorary Doctor of Science degree to Dr. Angrist. In presenting this degree to him, President Samuel Belkin of Yeshiva cited his untiring efforts on behalf of the development of Albert Einstein College of Medicine during its early days, his long years of devoted service to the medical college, and his achievements in medical education. In 1972, the City University of New York presented him with the Townsend Harris Medal for distinguished service to medicine. That same year, he assumed the editorship of the *Journal* where his medical and scientific training, coupled to his dedication and interest in research, maintained a high standard of excellence in scientific medical publishing. During the decade of his editorship, he wrote 84 editorials dealing with virtually all of the social, political, and philosophical issues facing modern medicine. In these, he courageously addressed many controversial and thorny issues in a frank and learned manner, putting forth his point of view, while simultaneously exposing the facts in an objective fashion.

Since late 1982, Dr. Angrist has served as editor emeritus of the *Journal*. His experience, wisdom, and counsel have proven valuable to the new editor and the *Journal's* new consulting editors. His regular presence at the *Journal* offices provides both the editors and the staff with the benefit of a link to the past excellence of this publication and fresh and insightful views on many scientific, social, and political issues now in the mainstream of medicine.

Pascal James Imperato, M.D.
Consulting Editor
New York State Journal of Medicine

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This issue of the *Journal* is devoted to Alfred Alvin Angrist, M.D., by his students and colleagues in celebration of his 80th birthday. We do this not solely to recognize his many achievements as physician, teacher, and investigator, but also to salute an extraordinary man.

A native of New York City, Dr. Angrist was graduated from the College of the City of New York and received his medical degree from the Long Island College of Medicine. His entire medical career has been spent within the city of New York. He was an intern at the Bronx Hospital and trained in pathology at Metropolitan Hospital. His skill as pathologist and teacher was soon recognized, and he joined the faculty of the New York Medical College. He was appointed Director of Laboratories at the new Queens General Hospital, where he built a strong department and made important contributions in diagnostic and investigative fields of pathology.

His ability and status in his specialty grew rapidly along with his fame as a teacher of medical students. It was, therefore, a not unexpected tribute to his deserved reputation that he was chosen to chair the department of pathology at the new Albert Einstein College of Medicine. In this position, which he held for more than 15 years, Dr. Angrist's talents were given full range. His personal warmth, boundless energy, and enthusiasm were valuable adjuncts to his teaching skills, and he became a great favorite among the students at the school. He helped to develop a sound curriculum and gathered to his faculty men and women whose interests in teaching and research complemented his own. He has taught and trained many excellent physicians and skilled pathologists, who benefited from his inspiration, sense of responsibility, and search for excellence. They now occupy important positions in academic and health institutions in this country and abroad.

Dr. Angrist did not permit his attainment of emeritus status to interfere with a very active career as consultant pathologist to several hospitals, forensic pathologist acting at trials as witness mainly for the defense, and editor of the New York State Journal of Medicine. To each of these roles, he has brought the same honesty and integrity that are the basic strengths of his character. He has always fought for truth and fairness and supported those who have needed his help. He has made time to help people with their problems. His kindness and generosity to so many individuals in difficulty is known to all who have been associated with him. Whether colleague, student, secretary, or morgue attendant, he has given advice and aid, professional, personal, and financial. He has supported many people when their need was greatest, and he is loved for his friendship, warmth, and goodness. Dr. Angrist is a physician in the finest and broadest sense of the word, whose interest in and concern for people spans every aspect of their lives. He was blessed by having a loving wife who was just as fine as he is.

Dr. Angrist has received many well-earned honors in respect of his accomplishments as physician, educator, and researcher. These have been given by his colleagues, his students, and the academic community. To these high honors is added a personal tribute, "Dr. Angrist, it is an honor to be a member of your profession."

Irving M. Ratner, M.D.
Clinical Professor of Pathology
Albert Einstein College of Medicine

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A personal note on Alfred Angrist

When Al Angrist was elected president-elect of the Medical Society of the County of Queens in 1948 he ran as a maverick. He was not the "establishment" candidate. His election was assured by an outpouring of former students who regarded him so highly that they organized a winning campaign on his behalf.

This episode illustrates two of Al's most important attributes which I have admired, throughout the years of our friendship. First, Al has always been an independent thinker, a talent that led to many disputes at meetings and over our companionable luncheons. We often disagreed, which was exciting, and which tended to solidify our friendship rather than weaken it. Secondly, Al has invariably inspired love from his students.

Al's great success as a teacher may be due to his never having been pedantic. His joi de vivre, lively sense of humor, sincerity, and modesty are a refreshing combination in a professor.

Al is also a very religious person. He has great faith in the goodness of man and in the value of life. I am grateful for the friendship of this good man and true physician.

George J. Lawrence, Jr., M.D.
Director, MSSNY Scientific Activities
Chairman, Board of Trustees,
Queens County Medical Society

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J-9043-4 July 1981

The Physician as a Man . . . the Man as a Physician

A Jewish viewpoint

David M. Maeir, M.D.

Physicians and scientists devote an inordinate effort to exchanging information on their scientific successes and failures and their innovations in medicine. They have established a "printing industry" devoted to the reportage of scientific progress. New journals and texts are added to this mass of literature at an appalling rate. Most of what is written concerns "where we are" or "what we have done" in medicine. Very little effort is directed to the question, Where are we? or better yet, Where do we want to go? This essay is an attempt to comment on the nonscientific aspects of our profession, our progress, and regression, utilizing an approach that is inexact and unscientific, one that would probably not be generally acceptable for publication in a medical journal.

In the broad spectrum of the specialties of medicine, pathology is perhaps the least "people concerned." As a pathologist for close to two decades, active in a diagnostic and research environment, swept along by the currents of the scientific and medical activities to which my colleagues and I devoted our time, I had little opportunity to step to the sidelines and gain an overview of our role as physicians. Having spent the past decade away from such day-to-day activities in pathology and clinical medicine in general and having devoted my time to health planning and administration, I have begun to see our responsibilities from a different vantage point. I have become interested in the following questions:

- *What is the role of the physician in medicine today?*
- *How do we view ourselves?*
- *How does society view us?*

A historical perspective often aids one in understanding sociologic phenomena. The physician has been a focal member of society for as long as history has been recorded. He has, however, undergone interesting metamorphoses in his role during this time. We might call them mutations. Reviewing them may help us answer the questions raised.

The physician of antiquity served as priest, often as sorcerer; he was considered the agent of a benevolent—or malevolent—power. In more ordered societies with systems of theology, he became the interpreter of divine will, the repository of incantations and spells that could convince the gods to alter their decrees affecting his patients.

In ancient Jewish society ordered by religious law, in which the Kohen (priest) was the physician, his supernatural powers were combined with preventive medicine and sanitary hygienic measures. In each society the wise physician-priest combined his personal observations and folk medicine with this sacerdotal role. He indulged in therapy, but he never forgot that he was a divine agent and that illness was "an act of God." The physician's ability to interfere in this process of divine retribution was very limited. His clinical successes were few, and his patients attributed them to the will of the gods. Men in general had no right to interfere in the affairs of God in directing and determining health and disease. In one form or another, this physician-priest persisted until the development of early Greek medicine.

It was at the Medical School of Cos that progress into the world of reason commenced. It was in that environment that the physician underwent his first mutation—no longer fantasies, no longer incantations, but an attempt at methodical observation and scientific reasoning. The image of the physician-scholar began to emerge. Of course, superstition and/or theology persisted. The Athenian father of 2,400 years ago, when worried about the persistent cough of his growing son, would ask Hippocrates for advice, or he would send his son to the Palestra for a systematic program in gymnastics, rather than first seek the aid of spells and spirits. Only when human skill was exhausted or proved ineffective would he seek the assistance of the divine Apollo and his son, the hero-physician Aesculapius, at Epidaurus.

Philosophy and medicine, as they developed in the centuries that followed, completed the transmutation of the physician-priest into the physician-scholar. This new physician preempted the power of the wrathful spirit who caused illness. Divine retribution may have been the cause of illness, but man now

. . dedicated to A. A. Angrist

Based on a presentation to the London Medical Society, 1981.

Reprint requests contact: David M. Maeir, M.D., Director, Shaare Zedek Hospital, Jerusalem, Israel.

possessed the wisdom and tools to alter divine decisions. The physician began to use his newly discovered power of observation, to reason and to understand the nature of illness, and to devise methods to combat disease. The glorious journey into the future had now begun. This physician-scholar, in 2,000 years of progress, became the physician that humanity has exalted. His ability to succor the ill and cure the lame raised him to the pinnacle of society. His path to this pinnacle was not a smooth one. The physician had to overcome ignorance, superstition, and schismatic obstruction. Arabian, Galenic, and other schools and systems of medicine all blended, in the end, to mold a physician whose mind and hand became the repository of knowledge and the power to heal. He taught his students that the ability to heal was indeed "God given", that to be successful they must understand that the subject of their attentions was nothing less than man, God's finest creation, and that as physician-scholars they must be prepared to assume total responsibility for their actions. He no longer was the physician-priest of antiquity with only an intercessionary role.

Although a span of about 1,500 years separated Hippocrates from Maimonides, some 600 years passed until the time of Sir William Osler. Yet all three men were exemplary of this human species, the physician-scholar. Maimonides, extraordinary rabbi-physician-scholar and author of many medical texts, fought the "determinism" of his contemporaries who opposed human medical intervention in "God-caused" disease and illness. The remnants of this irrational determinism persist to this day in certain religious sects in our society. Sir William Osler was a physician who combined the classic with the modern, the humane with the scientific. He dealt with the totality of human experience, of which illness was only one small facet. His book of essays *Equanimias* was the gift I received from my medical school upon graduation. I wonder how many young physicians of today have this slim volume on their bookshelves. In but the span of a single lifetime after this exemplary physician, we are already on our way into the next mutation. No longer the physician-priest, no more the physician-scholar . . . it is the physician-scientist that we now strive to become. What has ocurred in our environment to effect this change?

Overwhelming accomplishments in the technologic and scientific aspects of medicine have advanced us the equivalent of light years in a span of less than half a century. Medical technology has advanced in the past 50 years more than in the previous 5,000. We now know so much about disease and are able very successfully to control and prevent it with these new tools. As physicians, however, we have in some ways reverted to a role not unlike that of the physician-priest of antiquity. Many of us have again become agents and intermediaries; no longer of the gods or of spirits or of a divine order, but high priests and laboratory technologists of a mechanistic and technical scientific system that decides for us how and in which manner we are to deal with the humans entrusted to our care. The development of a computer console that will diagnose disease is considered the zenith to which we aspire. There are still a few grey-haired physicians among us who have not yet let the machines take over. But most of the younger generation of physicians have gone the way of the multichanneled blood analysis, of the computerized medical history, and of ultrasonic and computerized tomographic imaging. Their hands no longer tap the chests and abdomens of patients meaningfully. Their minds no longer conduct the orchestra of medical care. They have become middlemen, carrying out the decisions made by laboratories and their machines. The standard of hospital departments and the criteria for their approval are based on equipment. These machines, which have not learned to measure human suffering or to understand the vargaries of the human condition, have become the milestones of medical progress.

They are also the symptoms of the outstanding illness society faces today, *the dehumanization of medical care*. This dehumanization reflects itself in many ways. The common practice of submitting the patient to a battery of laboratory and radiology examinations before there is even a "laying on of the hands" is only one example. Physicians have no time to listen. They have lost the ability to communicate with their fellowman. Intensive care is essentially the conversion of the human "person" to the human "preparation." Our excellence in science has led us to focus down with a fine objective on the diseases we are treating, very often forgetting their host. Dehumanization is the "name of the game."

We teach what we practice. In the halls of academia, we hear students talk of "the gallbladder in Room 337" or of "the appendix in the emergency receiving room." This is not just a matter of parlance. These students often do not know the patient's name, his background, or what his nonmedical problems are. They are studying to become physician-scientists. They zero in on the leukocytes that permeate the mucosa of the patient's viscus to the exclusion of all else. They do this exceedingly well, and they are most successful in treating the process.

Dehumanization pursues us to the very end. It expresses itself in the multiple pipes and tubes, "the blowers in," "the suckers out," that are attached to us when we leave this world. It has been said that all of life is but a preparation for death. While we may no longer accept this as theologic doctrine, nevertheless, we must concede that one of life's major experiences is death.

The new doctor is unable to cope with death. Physician-scientists are trained in an environment in which death exists only as a sign of medical failure, of scientific breakdown. As a hospital director, I must often intervene with doctors on behalf of families who choose to react to death in a human rather than a scientific way. These families sometimes wish to have their relatives die at home or surrounded by the family in the hospital sickroom. The sterile scientific vision of death shared by many young doctors is one in which the muted cadence of the pulsation of the respirator is accentuated by the high-pitched beep of the monitor, both against a background of silence and in a setting of bright white lights. Weeping, hand holding, comforting—all the modalities of human communication are forbidden.

Paul Ramsey in his book *The Patient as a Person* writes: "The sting of dying is solitude. What doctors should do in the presence of the process of dying is only a special case of what should be done by all to make a human presence felt to the dying." The major problem of dying is how not to die alone. It should not be axiomatic, even under the most adverse conditions, that the patient is not aware. The sound of human voices, the clasp and feel of a human hand are as important in keeping company with the dying as are the glucose drip and relief of their pain. Ramsey concludes: "Desertion is more choking than death, and still more feared." The practitioners of this modern scientific medicine are deserting the fellow human beings entrusted to their care long before their death.

A reexamination of the past, a reappraisal of the relevance of Judaic tradition, suggests that at this time in the history of medicine, more than ever in the past, a contribution inspired by Jewish sources and resources may help us arrest or reverse the mutation I have described and thus rehumanize the organism.

What is this Jewish tradition in medicine? What can be its effect? What, in fact, is the relationship between Jews and Judaism and medicine? It has too often been defined and delineated by numbers only, by statistics—by the fact, for example, that so many Nobel laureates in medicine are Jewish or by the number of professional chairs held by Jews in various fields of medicine. There is a totally different dimension to this relationship, a dimension that cannot be expressed in numbers. Medicine and Jewish scholarship have gone hand in hand from time immemorial. The leading Jewish rabbinic scholars and philosophers of many generations were often also physicians. Maimonides was not the exception, he was the rule. From the beginning of history until modern time, Jews have exercised a broad influence on the development of medical science. Jewish theology, unlike most other systems, was never troubled by human interference in illness. Even when illness was still considered divine retribution, the physician in Jewish tradition was regarded as the instrument through whom God permitted and effected the cure.

The continued importance of medicine among Jews is best seen in the long line of physician-rabbis—Gersonides, Nachmanides, Yehuda Halevi—who were all philosophers, rabbis, and physicians. Medicine was a noble profession in Jewish tradition long before there was a Nobel Prize. Jewish physicians were in the forefront of medicine in the Middle Ages. They participated in the establishment of the School of Medicine at Salerno. The School of Montpelier owes its existence largely to the Jewish scholars whose portraits adorn the marble plaques commemorating the early masters of this famous university. Jewish scholars often served as the court physicians to Moslem and Christian rulers. This seminal effect of humanistic Judaic tradition on medicine fostered a humanistic approach to medicine, an attitude that medical care—in that it dealt with *man*—required moral control, ethical consideration and, above all, love for one's fellowman. Medicine was a noble pursuit, in that there was no profession that provided man with a greater opportunity to serve his fellowman than that of the physician. The physician's "Daily Prayer," once attributed to Maimonides but in fact composed by a German Jewish physician of the last century, states in most simple terms the humanistic approach to medicine of this Jewish tradition.

> Inspire me with love for my
> art and for Thy creatures.
> Do not allow thirst for profit,
> ambition for renown and admiration,
> to interfere with my profession,
> for these are the enemies of
> truth and of love for mankind
> and they can lead astray in the
> great task of attending to the
> welfare of Thy creatures.
> Preserve the strength of my
> body and of my soul that they
> ever be ready to cheerfully
> help and support rich and poor,
> good and bad, enemy as well as
> friend. In the sufferer, let me
> see only the human being.

It is notable that the ethical and moral values based on Jewish religious tradition have persisted and are widely accepted in today's very secular environment. Theologically inspired truths and principles that have inherent value apparently do not need divine reinforcement in order that they continue to be considered valid. The ethics of Jewish religious tradition and its Christian offshoots remain moral warp and woof of today's almost totally secular society. Physicians should see it to that the fabric of this tradition continues to clothe the medicine of tomorrow. Humanistic medicine must supersede and guide scientific medicine. There is, indeed, a growing concern among physicians about medical ethics. The London Medical Group, founded in 1963; the Journal of Medical Ethics, now in its fifth year; and the Hastings Center and its Institute of Society, Ethics, and the Life Services in the United States all have begun to deal with these issues in a very substantive manner. These developments, however, are leading to the evolution of a "medical ethic" that, although new and different, is still not the answer to the problem.

T. Leake, on rereading Thomas Percival's classic work *Medical Ethics*, published in Manchester in 1803, calls it "a manual of medical professional conduct." Medical ethics for too many years were concerned with the issues of whom one charged, whom one treated without charge, what information one was permitted to disseminate, and so forth. Nowadays, medical ethics have become much more sophisticated. They are a complex system of rules that deals most often in legal terms, with questions such as abortion, euthanasia, the status of the offspring of surrogate pregnancy, and transsexual operations. This new code of behavior surely is not the new guide we require.

In commenting on the need for a new ethic in medicine, Professor Carleton Chapman, in a lecture at Harvard, said:

> To construct a code of ethics that is appropriate to our own time, and that is capable of serving as a "guide to the perplexed physician," we should begin with a concise statement of the patient-centered ethic itself; after such a statement there should appear a list of the most frequent explicit themes of ethical dilemmas, each heading up an explanatory paragraph to include, where appropriate, key legal citations and references to relevant ethical commentary. Euthanasia is one such theme; abortion is another. The extent and limits of the patient's right to know the truth and what the law calls informed consent are two other issues.

Professor Chapman uses the right phrase "a patient-centered ethic," but he does not accept its full implication. His suggestion is but a further sophistication of the codes we now possess, an updating to meet the new procedures we are able to perform, an answer to such questions as Whom do we abort? Whom do we stop treating?

Patient-centered ethics have much broader implications. A patient-centered system must be based on interaction between the patient and the physician that goes beyond scientific technology. Indeed, the major cultural problem of our age is the failure of integration of materialistic science with the full range of human needs. This problem expresses itself in our failure to cope with many aspects of life, such as ecology, pollution, politics, and especially, nuclear science. Dehumanization in health care is just one facet of our inability to reconcile our magnificant scientific accomplishments with our human concerns and needs. The patient is more than a body and, therefore, surely more than his disease. We understand so much about his consciousness, his awareness, his overt and covert means of communication, and his power of adaptation. Only by utilizing our knowledge of man and undertaking his medical care in its broader framework can medicine become the art it should be, in addition to the science it is.

Health professionals must be prepared to invest their own humanity in this search for humanistic medicine, for if modern medicine is to practically acknowledge human feeling, health professionals have to be willing to explore feelings, including their own. If modern medicine is to recognize the patient's need to consider the questions of life evoked by illness, health professionals must also be willing to explore life values. This must be done not only at the level of care. These values must be indicated in the very beginning of the development of one's self-image as a physician.

Medical education must include in a meaningful way the study of subjects such as sociology, psychology, and anthropology. To reach the application of humanistic attitudes in medical practice, medical curricula must incorporate a formal and deliberate program of teaching humanism. Very often these subjects cannot be taught adequately by physicians alone; cross-disciplinary input is essential. Humanization of medicine is too often only philosophized about in our medical schools and rarely acted on. We must teach what the human being is—his fears, his hopes, and above all, his capacity. We must teach the physician to be responsive not only to the body of the patient but also to his feelings, his mind, his will, his imagination, his creativity, his aspirations, his values, and his capacity for making ethical choices.

As men and women, both we and our patients possess the capacity of body and mind, of psyche and soma, to cope with the problems of living. Synthesizing this ability with the technology of modern medicine, our horizons as physicians broaden beyond imagination. True humanistic medicine can herald for us a renewed personal fulfillment in our vocation and the final synthesis of the physician-priest-scholar-scientist into the physician-man. ■

A New Look at the Phenomenon of Neurosecretion

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One of the most dramatic recent developments in neurobiology is the rapidly accelerating flow of information on neuropeptides. Interest in this fascinating group of neuroregulators had its beginning with a discovery made in 1928 by Ernst Scharrer, who observed a class of strikingly unusual nerve cells in the hypothalamus filled with a secretory material comparable to that found in typical protein-producing gland cells such as those of the pancreas. He postulated that these exceptional nerve cells, which became known as "neurosecretory neurons," engage in endocrine activity and suggested their functional relationship with the pituitary gland. As it turned out, he was right on both of these counts. However, a long road lay ahead, and it required the persistent efforts of scores of investigators from different disciplines for this prophetic idea to become a reality.

The following discussion of the current state of the art will demonstrate that these pursuits have solved the enigma of the phenomenon of neurosecretion and have now taken us far beyond its original conception. In the course of time, they have given rise to a new discipline, neuroendocrinology, and have revealed new types of interneuronal communication that challenge the unique character of the nerve cell as visualized by the neuron doctrine. Peptidergic neurons are now recognized as a major cellular component of the nervous system, which encompasses not only the classic, or archetypal, neurons exemplified by those of the hypothalamus but many additional neuronal elements producing and making use of biologically active peptides as messenger substances. These important breakthroughs have been made possible by essential advances in methodology and are characterized by profound conceptual changes. Biochemical and ultrastructural insights have now established beyond doubt that neuropeptides have the capacity to function in a variety of ways not germane to conventional neuroregulators.

. . . dedicated to Alfred A. Angrist in friendship and gratitude.

Neurohormonal activities

The most nonconventional mode of operation is exemplified by neuropeptides of the magnocellular neurosecretory nuclei of the hypothalamus (vasopressin, oxytocin), which signal to nonneural effector organs over long distances and have earned the brain the status of an endocrine gland in its own right. A second group of neurohormones, the hypophysiotropins (releasing or regulating factors) provide the all-important means of communication between the nervous system and the adenohypophysis. In this instance, ie, when the brain addresses itself to endocrine effector cells, the rationale for the operation of blood-borne neuronal messenger substances is obvious. With the recognition of the neuroendocrine axis, the very special status of peptide-hormone secreting nerve cells in the hypothalamus, as distinct from conventional neurons in the rest of the central nervous system, seems firmly established.

Close-range neuropeptide signals

A new dimension of peptidergic activities has been introduced by the demonstration of release sites of bioactive neuropeptides in more or less close spatial relationship to various effector cells. These ultrastructural and immunocytochemical data, combined with neurophysiologic evidence, have made it increasingly clear that peptidergic neurons are able to communicate in more than one alternative, ie, nonneurohormonal, way. Some of them come very close to the pattern of classic synaptic intervention; in others, the signal is neither strictly "private" (synapticlike) nor (neuro)hormonal. In short, there is an intermediate range of operations, both in space and time.

The most fascinating and quite unexpected insight gained in this area of research is that even neurons can be addressed by neuropeptides in this more or less "directed" manner. The conveyance of chemical signals to neuronal effector cells over a certain distance, ie, via the acellular interstitium, represents a principally new form of neuron-to-neuron signaling. Another new development concerns the synaptic or nonsynaptic type of intervention known as neuromodulation, in which a signal synaptically transmitted between two conventional neurons is either enhanced or, more often, depressed by an opioid peptide supplied by a third neuron.

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Spectrum of neuropeptides

The range of functional capacities of peptidergic neurosecretory neurons has been greatly enriched by the discovery of an impressive variety of neuropeptides other than those long known to be provided by the classic neurosecretory neurons. Their number, in the vertebrates alone, now amounts to more than 20. Mapping by immunocytochemical procedures at the light and electron microscopic levels has shown us the wide distribution of such peptidergic elements in extrahypothalamic areas of the central nervous system and even in nonneural tissues, eg, the adenohypophysis and the diffuse neuroendocrine system of the digestive tract. In short, the spectrum of bioactive peptides—their sites of production and distribution and their diverse modes of operation—is far greater than originally conceived.

Coexistence of neuroregulators

One of the newest and quite provocative developments in this active area of research is increasing evidence of the coexistence, within one and the same neuron, of two (or more) potentially neuroactive mediators. The demonstration in some of these neurons of more than one neuropeptide can be explained by the presumed derivation of these principles from a common precursor molecule, eg, proopiomelanocortin, by means of enzymatic cleavage. The interpretation of the coexistence of neuropeptides with conventional neurotransmitters (eg, catecholamine and enkephalin, serotonin and Substance P) is more difficult, since it challenges Dale's law (one neuron, one transmitter). Here the conventional partner may act as a primary transmitter and the peptide as a cotransmitter. However, the nature of possible auxiliary roles played by peptidergic principles under these conditions is still too little understood to invalidate this long-standing biologic law.

Evolutionary aspects

Peptidergic neurons appear to have been shaped by evolutionary forces. Their long phylogenetic history and the impressive structural stability of the active principles they furnish are documented by the functional and biochemical similarities, in invertebrate and vertebrate animals, of these peptides as well as their receptor molecules. It is tempting to propose that the "endocrine" roles of neurons antedated the development of a synaptic apparatus. The degree of specificity and diversity attained by the peptidergic control systems in operation now can be understood on the basis of the rich supply of various peptide principles available and also on the basis of the capacity of one and the same neuropeptide, eg, vasopressin, to function in several different ways, depending on where it is put to use. This neuroregulator, known primarily for its antidiuretic neurohormonal role, also seems to participate in the regulation of the adenohypophysis and to signal to extrahypothalamic neurons at close range. In the latter capacity, it appears to be involved in certain learning processes and the control of mood.

Conclusions

A new look at the phenomenon of neurosecretion tells us that we have, indeed, come a long way. Once considered to represent a very small aberrant minority, peptidergic neurons have now been identified in almost all parts of the nervous system, where they actually outnumber the rest of the neuronal elements. Moreover, the wide spectrum of individual neuropeptides known to date surpasses that of all other neuroregulators combined. Increasing evidence for the coexistence, in individual cells, of peptidergic and nonpeptidergic neuroregulators leaves much less room for "conventional" neurons than that assigned to them in the past and, in fact, calls for a reevaluation of the significance of their attributes. By the same token, a sharp borderline between neurons and other cellular species, especially endocrine cells, can no longer be drawn. All of these new facts and concepts introduced by the analysis of peptidergic phenomena amount to a quiet revolution in neurobiology.

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Autoimmune Response Following Vasectomy

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Following the discovery that antisperm antibodies develop after vasectomy, immunologic and morphologic changes in men and experimental animals have been repeatedly investigated to determine whether or not vasectomy induces systemic sequelae of an immunologic nature.

Spermatozoa are endowed not only with sperm-specific antigens[1] but also with antigens of the major histocompatibility complex.[2,3] As to the former, sperm-agglutinating antibodies after vasectomy are well documented in the sera of men and experimental animals.[4–9] Regarding the latter, lymphocytotoxic antibodies (LCA) have been studied in vasectomized men; the results have been variable.[10–14] Such LCA activity as was observed between prevasectomy and postvasectomy sera was considered to be insignificant. Autoantibodies against other than sperm antigens have also been studied in vasectomized men, with variable results.[15–17] Morphologic changes in the testes in vasectomized men and animals have been repeatedly studied, but the results have been conflicting.[18–23]

We are presenting here a review of our own observations on LCA and autoantibodies in the sera of vasectomized men,[24] together with the histopathology of testicular biopsies. In addition, we are offering a preliminary report on the effects of vasectomy in two different strains of mice.

Materials and methods

Men. The study group comprised ten men, aged 30 to 48 years, who underwent bilateral vasectomy under general anesthesia. Blood samples were drawn prior to vasectomy and at selected intervals following vasectomy, for a period of up to 24 months. Blood samples were similarly drawn from age-matched controls comprising male patients who underwent minor surgical procedures. In addition, healthy employees of the hospital were tested in order to determine the incidence of autoantibodies in a normal population. None of the ten study cases or the controls had received blood transfusions before or during the course of study. Biopsies from both testes were obtained in four of the ten men prior to and six months following vasectomy.

Mice. Ninety-three NZB mice and 100 SW mice, 2 months of age, were divided into groups: (1) vasectomy, (2) sham vasectomy, and (3) unoperated controls. Vasectomy and sham vasectomy were performed bilaterally under general anesthesia. Blood was obtained by orbital and sinus puncture, with the protocol of sampling the same as that for men. However, testicular tissues were obtained only at the time of sacrifice at the age of 15 months.

Lymphocytoxic antibodies. Sera of the vasectomized men and of the control subjects were tested for LCA by the microdroplet method of Terasaki and McClelland,[25] using a panel of freshly prepared lymphocytes (comprising both T and B cells) from 40 healthy donors. In addition, the sera of the vasectomized men were tested for LCA first by a modified Amos technique using (1) B lymphocytes from four cases of chronic lymphocytic leukemia, (2) cultured B cell lines, and (3) B cells from 11 normal donors. Second, they were tested by the NIH lymphocyte microcytotoxicity test,[26] using B cells from a case of acute lymphoblastic leukemia. The sera from the mice were not analyzed for LCA.

Autoantibodies. Antinuclear antibodies (ANA) and antismooth muscle antibodies (ASMA) were studied by standard indirect immunofluorescence. Appropriate controls were included for each test. The sera of the vasectomized and of the control men, as well as of the mice, were tested.

Histopathology. Paraffin blocks of tissues fixed in 10% formalin were prepared in the usual manner. Sections were cut at 5 μm thickness and stained with hematoxylin and eosin. Reticulum, PAS, elastic, and Masson stains were done on selected samples.

Results

Lymphocytotoxic antibodies. The sera of six of the ten vasectomized men (60%) showed a significant increase of LCA activity against our 40-donor panel of normal lymphocytes. This increase was noted between two and six months after vasectomy; it decreased or even disappeared after seven to 24 months (Table). When tested against leukemic B cells, strong LCA activity was demonstrated at one to 13 months after vasectomy in seven of the ten cases (70%). A weak reaction against the cultured B cell lines was noted in two of the ten study subjects. There was no reaction in any of the vasectomized men against the B cells from 11 normal donors. The

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Incidence of Lymphocytotoxic Antibodies in Serum Before and After Vasectomy

Case No.	Months After Vasectomy	Number of Positive Reactions[*] Panel I[†]	Panel II[†]
1	0	0	0
	1	0	0
	2	2	0
	7	3	2
	15	0	0
2	0	0	0
	2	5	0
	5	4	0
	6	4	2
	9	2	0
3	0	1[††]	0
	1	2	0
	3	1	0
	4	3	0
	7	0	1
4	0	0	1
	13	0	1
5	0	0	1
	5	2	1
	24	1	0
6	0	2[††]	0
	6	3	2
7	0	1[††]	0
	2	0	1
	14	0	2
8	0	0	0
	2	2	0
	4	0	0
	8	0	0
	12	0	1
	13	1	0
9	0	0	0
	8	0	0
10	0	1[††]	0
	1	1	1
	3	1	0
	7	1	0

[*] 40% of lymphocytotoxicity was scored as positive.

[†] Panel I: panel of lymphocytes from 40 healthy donors. Panel II: panel of leukemic lymphocytes (CLL and ALL) from five donors.

[††] LCA activity in prevasectomy sera is probably analogous to cold lymphocytotoxins observed in normal populations. Notice that, even in some of these men, vasectomy leads to a rise in LCA activity with time.

sera of the vasectomized men tested for autoantibodies against their own lymphocytes gave weak reaction in three cases and no reaction in the others.

The surgical control cases showed no rise of LCA activity within a postoperative period of up to one year. The sera of two of ten healthy hospital employees revealed an incidence of LCA activity similar to that reported in normal populations.[12]

Autoantibodies. On ASMA assay, a marked increase in titer was observed in one case, rising from zero prior to vasectomy to 1:160 after 19 months; a mild increase in titer was also noted in two others tested after 13 and 14 months. A rise in ANA titer from 1:20 preoperatively to 1:160 at 24 months after vasectomy was seen in one case; a mild increase was noted in another one tested after nine months. The control cases did not develop any significant titers of ASMA or ANA.

In one third of the mice, ANA and ASMA were found prevasectomy in every group and in both the NZB and SW strains. However, there was a definite group difference postvasectomy in that the vasectomized animals demonstrated rises in titers more frequently than the sham-vasectomy and control groups. Among those with positive reactions, there was considerable individual variation in magnitude of the antibody response, ie, some animals responded more strongly than others.

Histopathology. Two of the four men who had testicular biopsies showed significant changes after vasectomy (Fig). The seminiferous tubules were dilated. There was a wide range of degenerative changes of the germinal epithelium. Marked disruption of the germ cell layer and depression of spermatogenesis resulted in a variable decrease of spermatozoa and precursors. The tubular lumina contained sloughed immature germ cells, some spermatocytes, and macrophages. The tubular basement membrane displayed appreciable thickening. Similar histopathologic changes were seen in the testes of all vasectomized mice of both strains.

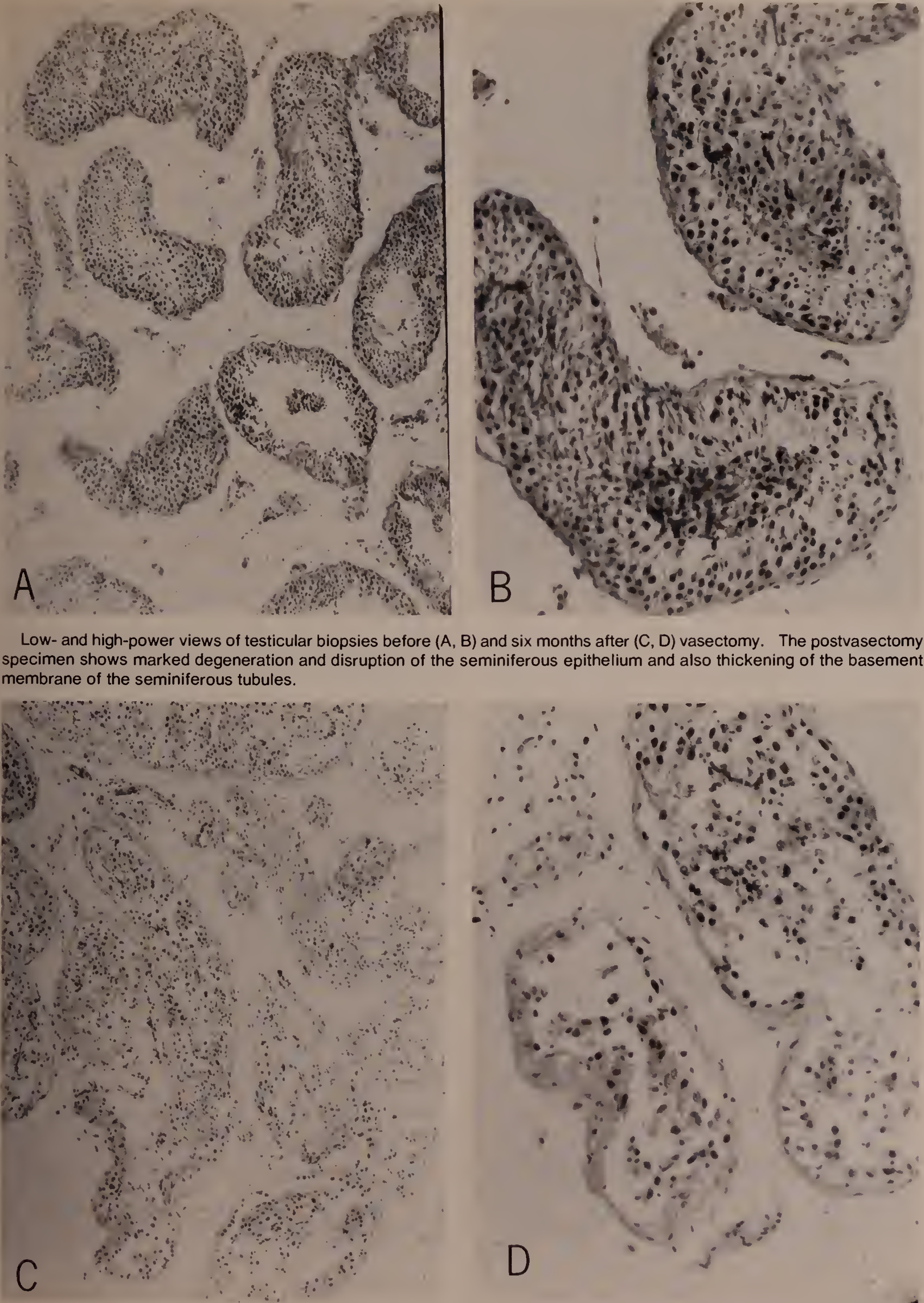
Comment

Contrary to scattered reports in the literature, our study clearly demonstrates that LCA do, indeed, develop after vasectomy. About 60% to 70% of our vasectomized men developed LCA, an incidence similar to the 50% to 60% incidence reported with respect to sperm-agglutinating antibodies. Conversely, this figure also indicates that postvasectomy immune responses regarding LCA and sperm-agglutinating antibodies are not universal. This parallels experimental data: Vasectomy in rats, mice, and guinea pigs elicited an antisperm antibody response in some strains but not in others.[27]

Apart from incidence, there were also variations in the intensity of immune reaction, not only relative to LCA but also relative to antibody titers of ANA and ASMA. Similarly, the incidence and intensity of immune responses to sperm antigens have been reported to vary among rats of different inbred strains.[28]

The mechanism or mechanisms of any histopathologic changes in postvasectomy testes have not been clarified. Some authors reported progressive degenerative changes of variable degrees in different animals,[18,19] others reported no changes at all,[21] and still others[20,22] claimed "regeneration" several months after vasectomy. In our series, morphologic changes in the testes were seen in two of the four men biopsied, illustrating individual variability of the effects of vasectomy. Similar individual variations were also seen in our vasectomized mice.

Assuming that immune responses to sperm antigens are related to absorption of sperm antigens,[29]



Low- and high-power views of testicular biopsies before (A, B) and six months after (C, D) vasectomy. The postvasectomy specimen shows marked degeneration and disruption of the seminiferous epithelium and also thickening of the basement membrane of the seminiferous tubules.

individual responses may vary because the rate and type of sperm antigens released may differ among individual men and among different animals and strains. It is also possible that the severity of any testicular changes after vasectomy among individual men and animals may depend on differences in immunologic responsiveness and barrier competence of the seminiferous tubules.[30]

That circulating antigen-antibody complexes to sperm antigens might arise as a consequence of vasectomy was demonstrated in rabbits[31]: Immune complexes were found in the basement membrane of the seminiferous tubules. Immune complexes were also seen in renal glomeruli and found to be specific for sperm antigens.

By reviewing all the pertinent literature, as well as our own data, we infer that autoimmune responses do develop as a consequence of vasectomy and that immune response genes are operative in determining whether and to what degree men and animals respond to sperm antigens. In support, Tung et al[32] demonstrated that the autoimmune response to sperm antigens in vasectomized guinea pigs was controlled by a single dominant autosomal or X-linked gene. Finally, it is worthy of note that a strong association was reported between HLA A-28 antigen and the presence of agglutinating antibodies to sperm heads.[14]

Summary

Ten men were studied for autoimmune responses following vasectomy. During a period of up to 24 months, lymphocytotoxic antibodies against panels of normal lymphocytes developed in six men and against a panel of leukemic cells in seven. A few of the men also developed marked increases of antinuclear and antismooth muscle antibodies. Degenerative changes of the seminiferous tubules were noted in two of four men in whom both prevasectomy and postvasectomy testicular biopsies were obtained. Since the immunologic and morphologic changes were observed only in a portion of those who were vasectomized and since the reactions varied in incidence and intensity among the subjects, it is suggested that immune response genes may be operative in the postvasectomy responses. The postvasectomy findings in a series of 193 SW and NZB mice were comparable to those in men.

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The Lymph Node

*An important site of Antigen-induced recruitment of circulating lymphocytes**

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Lymph nodes and spleens are unique organs histologically in that most of the lymphocytes seen in histologic sections are not permanent residents of these organs but are actually cells in transit. This nomadic population of lymphocytes enters the lymph nodes or spleen from the circulating bloodstream and afferent lymphatics and returns to the blood within hours to days. The transit times of the different lymphocyte subpopulations through lymph nodes differ. B cells appear to move through lymph nodes more slowly than T cells,[1] lymphoblasts more slowly than resting lymphocytes,[2] and suppressor cells appear to recirculate less than inducer cells.[3] Lymphocyte traffic is dramatically increased in lymph nodes draining the sites of antigen infection.[4–7] A critical question left unanswered by our studies concerns the specificity and subtype (ie, T or B) of the lymphocytes retained by the draining lymph nodes. Are lymphocytes with specific reactivity to the antigen used for immunization preferentially retained or not? In the studies described in this paper, relatively recently developed assay was used to monitor the traffic of specifically reactive lymphoblasts to lymph nodes draining the sites of antigenic challenge in two experimental murine models. In the first, either xenoantigens or alloantigens were injected into foot pads, and in the second, the same antigens were injected into the lungs. Results revealed that (1) there were marked increases in the retention of circulating lymphoblasts in the lymph nodes draining both the paws and lungs challenged with either xenoantigens or alloantigens, and (2) there was some preferential retention in these lymph nodes of lymphocytes with specific reactivity to the antigen used for immunization.

Materials and methods

Animals. Genetically inbred DBA/2J (DBA), (C3H/HeJ × DBA/2J) F$_1$ (CDF), and (C57BL/6J × DBA/2J) F$_1$ (BDF) female mice, 2 to 4 months of age, were obtained from the Jackson Laboratory, Bar Harbor, Maine.

Experiment 1: Recruitment to lymph nodes draining challenged paws

In both the xenogeneic and allogeneic models, labeled lymphocytes with specific reactivity to two distinct, relatively non-cross-reacting antigenic complexes were used so that the lymphocytes with specific reactivity to one antigen could serve as a simultaneous control for the other. One population was selectively labeled with ^{3}H and the other with ^{14}C, thus enabling us to determine the presence of each population in draining lymph nodes by liquid scintillation spectrometry.

a) ***Xenogeneic antigens.*** ^{3}H-labeled anti-CRBC (chicken red blood cells) and ^{14}C-labeled anti-SRBC (sheep red blood cells) lymphocytes of DBA origin were generated, pooled, and adoptively transferred IV to eight DBA mice challenged six hours previously in the right paws with CRBC and in the left paws with SRBC. Forty-eight hours postchallenge, each mouse was sacrificed, their draining lymph nodes (axillary, brachial, and popliteal) segregated into right and left samples, and each sample analyzed radiochemically.

b) ***Allogeneic antigens.*** This was similar to experiment 1a, except that the anti-C3H lymphocytes were labeled with ^{3}H, the anti-C57BL/60 (B$_6$) lymphocytes with ^{14}C, and both adoptively transferred to two groups of four DBA mice. The mice of the first group were challenged with CDF semiallogeneic apleen cells in the right paws and BDF semiallogeneic spleen cells in the left paws. The mice of the second group were injected with Hanks' balanced salt solution (HBSS) in all four paws.

Experiment 2: Recruitment to hilar lymph nodes of mice challenged intratracheally

a) ***Xenogeneic antigens.*** This was similar to experiment 1a, except that the ^{3}H-labeled anti-CRBC and ^{14}C-labeled anti-SRBC lymphocytes were adoptively transferred to three groups of four previously challenged DBA mice. The mice of one group had been challenged intratracheally with CRBC, those of a second group with SRBC, and those of the third with HBSS.

b) ***Allogeneic antigens.*** This was similar to

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* Supported by Grant CA 17467, awarded by the National Cancer Institute, DHEW.

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experiment 1b, except that the anti-B_6 lymphocytes were labeled with ^3H, the anti-C3H lymphocytes with ^{14}C, and both were adoptively transferred to three groups of four previously challenged DBA mice. The mice of one group had been challenged intratracheally with BDF cells, those of a second group with CDF cells, and those of the third with HBSS.

Experiment 3: Characterization of surface membrane markers of the selectively recruited lymphocytes

The experimental design was similar to that of experiment 1b, except that the pools of adoptively transferred ^3H-labeled anti-C3H and ^{14}C-labeled anti-B_6 splenic lymphocytes were enriched for T cells by the nylon-column technique or enriched for B cells by treating them with anti-Thy 1.2 serum plus complement. These methods have been previously described in detail.[8]

Generation of radioactively labeled antixenogeneic and antiallogeneic lymphocytes

a) ***Antixenogeneic.*** Anti-CRBC or anti-SRBC lymphocytes were generated in the spleens of DBA mice by immunizing them IV with 0.2 mL of a 20% suspension of CRBC (3×10^8 cells) or SRBC (1×10^9 cells), respectively. Three days later the anti-CRBC and anti-SRBC lymphocytes were preferentially labeled with ^3H and ^{14}C, respectively, by giving each of the CRBC-challenged mice intraperitoneal injections of 25 mCi ^3H-thymidine (3 Ci/mmol) and each of the SRBC-challenged mice similar injections of 5 μCi ^{14}C-thymidine (40–60 mCi/mmol), two and four hours before they were sacrificed. Thursh and Emeson[9] had previously demonstrated that in mice given an IV challenge with xenogeneic RBC, the DNA synthesis (ie, uptake of ^3H or ^{14}C-thymidine) by splenic lymphocytes with specific reactivity to xenogeneic erythrocytes peaks three days post-immunization.

b) ***Antiallogeneic.*** Anti-C3H or anti-B_6 lymphocytes of DBA origin were generated in the spleens of supralethally irradiated CDF and BDF mice, respectively, by giving them IV injections of 1.0×10^8 DBA spleen cells (one-way graft-versus-host reaction). Three days later, the anti-C3H and anti-B_6 lymphocytes were preferentially labeled with ^3H and ^{14}C, respectively, by giving each CDF mouse intraperitoneal injections of 25 μCi ^3H-thymidine (3 Ci/mmol) and each BDF mouse similar injections of 5 μCi ^{14}C-thymidine (40 to 60 mCi/mmol), two and four hours before their sacrifice. In experiment 2b, the radioactive labeling was reversed: The anti-B_6 lymphocytes were labeled with ^3H, and the anti-C3H lymphocytes were labeled with ^{14}C.

Although the experimental conditions were intentionally manipulated so as to selectively generate and distinctively label each pool of lymphocytes with specific reactivity to one xenoantigen or alloantigen, not all of the labeled marker cells possessed such specificity. A few, in fact, may have possessed cross-reactivity with other xenoantigens or alloantigens.

Paw challenge. For the xenoantigens, the mice were challenged subcutaneously in right or left front and rear foot pads with 25 μL of 40% CRBC or SRBC suspended in HBSS. For the alloantigens, a volume of 50 μl of 2.0×10^7 semiallogeneic spleen, suspended in HBSS, was injected subcutaneously into each paw.

Intratracheal challenge. Mice were anesthetized intraperitoneally with Nembutal (0.5 mg/g weight of mouse) and their trachea exposed by a midline incision of the neck. One hundred microliters of a 20% suspension of xenogeneic red blood cells in HBSS or 5.0×10^7 semiallogeneic spleen cells in HBSS were injected into the trachea in four 25 μL pulses, 30 seconds apart, by means of a 1.25-mL syringe equipped with a Hamilton repeating dispenser (Hamilton Co, Reno, Nev) and a 27-gauge needle. The use of small pulses alternating with 30-second rest periods avoided the development of severe respiratory distress in the challenged mice. During the injection, the mice were placed on a 30° incline with head elevated to facilitate the deposition of the cells in the terminal airways.

Preparations of spleen cell suspensions. Spleens were gently minced or teased apart in HBSS, passed through a series of graded stainless steel screens, and washed three times, as previously described.[7] The two pools of suspended spleen cells were combined, brought to a concentration of 1 to 2×10^7 cells/mL, and a 0.5-mL portion injected into each of the experimental recipient mice via the lateral tail vein.

Irradiation. Recipient mice were irradiated in an acrylic plastic box by a cobalt-60 teletherapy unit (courtesy, Krystyna Okonioewski and Dr. C. Botstein, Department of Radiotherapy, Montefiore Hospital and Medical Center). The BAF and BDF recipients were given 900 rads and 925 rads, respectively, at a rate of 71.0 minutes at a distance of 80 cm.

Preparation of tissues for scintillation counting. The lymph nodes of each mouse were carefully removed, freed of fat by sharp dissection, soaked in three daily changes of acetone at room temperature, and digested in 1 mL of N NaOH.

Counting of samples. The lymph node digest was suspended in a dioxane Cab-O-Sil (Packard Instruments Co, Inc, Downers Grove, Ill) cocktail as previously described[7] and the counts per minute (cpm) ^3H and ^{14}C obtained simultaneously in a Beckman LS-350 liquid scintillation spectrometer (Beckman Instruments, Inc, Fullerton, Calif). The efficiencies of the ^3H and ^{14}C and the crossover of ^{14}C counts into the ^3H channel of the experimental samples were determined by the addition of ^3H or ^{14}C toluene internal standards (New England Nuclear, Boston) to control samples obtained from mice that did not receive radioactive materials and processed in an identical fashion to that of the experimental samples.

Treatment of data and statistical analysis. The cpm ^3H and ^{14}C were converted to disintegrations per minute (dpm)[10] and the ratios dpm ^3H/dpm ^{14}C determined for each sample. The porportions of specifically reactive to nonspecifically reactive lymphocytes contained in the lymph nodes were inferred from their mean $^3H/^{14}C$ ratios. The differences in the mean $^3H/^{14}C$ ratios of the lymph nodes of the paired groups of challenged mice were compared statistically by two-tailed t tests for independent samples.[11] P values $<.05$ were considered insignificant. The relative differences between the $^3H/^{14}C$ ratios of the lymph nodes of the paired groups of challenged mice were also expressed by dividing the $^3H/^{14}C$ ratios of the nodes of the CRBC or CDF challenged sites by those of the SRBC or BDF challenged sites (ie, CRBC/SRBC or CDF/BDF in experiments 1a, 1b, 2a and 3). In experiment 2b, BDF/CDF was used, since in this experiment the anti-B_6 cells were labeled with ^3H. Mean ratios greater than 1.00 indicated that selective recruitment was present and gave quantitative approximations of the degrees of selective recruitment. Estimates of the absolute values of specifically recruited lymphocytes (SRL) in each set of lymph nodes draining sites challenged with CRBC or CDF spleen cells in experiments 1a, 1b, 2a, and 3 and BDF spleen cells in experiment 2b were made by use of the formula dpm SRL = (dpm ^3H) − (dpm $^{14}C \times$ R control) as previously described.[8,12,13] For each set of lymph nodes, the dpm SRL is an estimate of specifically recruited lymphocytes (ie, of the immunologically specific component of lymphocyte recruitment), and the R control is the $^3H/^{14}C$ ratio of the lymph nodes of a control group challenged with a third-party indifferent antigen. The mean dpm ^3H values of the lymph nodes draining the CRBC or CDF challenged sites in experiments 1a, 1b, 2a, and 3 and BDF challenged sites in experiment 2b provide estimates of the total numbers of lymphocytes retained by those lymph nodes. The mean (dpm $^{14}C \times$ R control) value of each group is an estimate of the amount of ^3H retained in the whole tissues by virtue of nonspecifically recruited lymphocytes, since (dpm $^{14}C \times$ R control) = dpm ^3H − dpm SRL. Differences in mean dpm ^3H or dpm SRL between groups were evaluated statistically by two-tailed t tests for independent samples as described.

Results: Experiment 1

*a) **Xenogeneic antigens.*** The mean $^3H/^{14}C$ value of the right lymph nodes draining the sites of injections of CRBC was significantly higher than that of nodes draining the sites of injections of SRBC (Table I, columns two and three). This markedly higher value indicates a preferential accumulation of ^3H-labeled anti-CRBC in the right CRBC challenged nodes and/or a preferential accumulation of ^{14}C-labeled anti-SRBC in the left SRBC challenged nodes. The R/L ratio (column four), which would be approximately 1.00 in the absence of selective recruitment, was in this experiment an impressive 11.1. Even more impressive was the fact that over 70% of the total dpm ^3H (column five) (an estimate of total recruitment) in the right nodes could be accounted for by anti-CRBC lymphocytes (SRL, column six).

*b) **Allogeneic antigens.*** Lymph nodes draining the sites of CDF injections retained approximately eight times as many dpm ^3H as did lymph nodes draining the sites of HBSS injections (Table II). Selective recruitment of specifically reactive lymphocytes was also demonstrated in this experimental model as indicated by the $^3H/^{14}C$ ratios (right > left) and R/L ratio of 2.01. In contrast, the $^3H/^{14}C$ ratios of the right and left lymph nodes draining the sites of HBSS injections were approximately equal with an R/L value of 1.02. In this model, the dpm SRL accounted for only 30% of the total dpm ^3H in the right node.

Results: Experiment 2

Total recruitment as indicated by dpm ^3H was sevenfold to eightfold higher in the hilar lymph nodes of mice challenged with CRBC or BDF than in those of the hilar nodes of HBSS-challenged mice. The $^3H/^{14}C$ ratios (A > B) and A/B ratio >1.00 again indicated the presence of selective recruitment. Forty-two percent of the total dpm ^3H retained in the nodes of CRBC-challenged mice could be accounted for by SRL, while only 22% of the dpm ^3H retained in nodes of BDF-challenged mice could be accounted for by SRL (column six).

Results: Experiment 3

When labeled donor cells were treated with normal mouse serum plus complement (unseparated cells), selective recruitment to lymph nodes draining the sites of injection of CDF cells was similar to that observed in experiment 1a (Table III). When labeled donor cells were enriched for T cells by the nylon-column technique, the R/L value was significantly increased (1.92 to 2.49), suggesting that the preferential recruitment of T cells to the nodes was greater than that of non-T cells. Mean dpm ^3H and SRL values of nodes of these animals were also relatively increased, considering that the portions of nylon-column-treated donor cells adoptively transferred to these mice contained approximately one half the total dpm ^3H as did the portions of unseparated donor cells given to control mice. The R/L value of the nodes of mice receiving labeled donor cells plus complement did not differ significantly from those receiving labeled control cells. Mean SRL values of the nodes of these mice were decreased to 44% of control values, suggesting that at least 56%

TABLE I. Selective Recruitment of Specifically Reactive Lymphocytes to Draining Lymph Nodes of Mice Injected in the Paws With Xenoantigens or Alloantigens

Challenge	^{3}H/^{14}C Right	^{3}H/^{14}C Left	R/L[1]	dpm ^{3}H ($\times 10^{-2}$)	dpm SRL[3] ($\times 10^{-}$)
CRBC-SRBC[2]	21.87 ± 0.812	1.98 ± 0.074[5]	11.14 ± 0.544	60.1 ± 2.69	42.6 ± 2.13
CDF-BDF[3]	5.21 ± 0.139	2.62 ± 0.144[5]	2.01 ± 0.127	28.0 ± 4.40	8.6 ± 1.90
HBSS[4]	3.21 ± 0.161	3.16 ± 0.026	1.02 ± 0.051	3.4 ± 0.47	0.04 ± 0.09

[1] R/L = Right/Left

[2] Mice challenged in right paws with CRBC and left paws with SRBC. Anti-CRBC lymphocytes labeled with ^{3}H and anti-SRBC lymphocytes labeled with ^{14}C (eight mice in this group).

[3] Mice challenged in right paws with CDF cells and left paws with BDF cells. Anti-C3H lymphocytes labeled with ^{3}H and anti-B$_6$ lymphocytes labeled with ^{14}C (four mice in each group).

[4] Control for CDF-BDF. Mice challenged in all four paws with HBSS.

[5] Probability difference between this value and that of right side due to chance <.01.

TABLE II. Selective Recruitment of Specifically Reactive Lymphocytes to Hilar Lymph Nodes of Mice Injected Intratracheally With Xenoantigens or Alloantigens

Challenge	^{3}H/^{14}C A	^{3}H/^{14}C B	A/B	dpm ^{3}H ($\times 10^{-2}$)	dpm SRL ($\times 10^{-2}$)
CRBC-A[1]					
SRBC-B	11.28 ± 0.232	3.85 ± 0.112[3]	2.93	6.1 ± 0.20	2.54 ± 0.04
HBSS	...	...	...	0.8 ± 0.13	...
BDF-A[2]					
CDF-B	8.36 ± 0.387	5.14 ± 0.058[3]	1.63	13.6 ± 2.50	3.00 ± 1.01
HBSS	...	...	...	1.9 ± 0.41	...

[1] Group A challenged with CRBC and group B with SRBC. Anti-CRBC lymphocytes labeled with ^{3}H and anti-SRBC lymphocytes labeled with ^{14}C.

[2] Group A challenged with BDF cells and group B with CDF cells. Anti-B$_6$ lymphocytes labeled with ^{3}H and anti-C3H lymphocytes with ^{14}C.

[3] Probability difference between this value and that of group A due to chance <.01.

of the SRL retained were anti-Thy 1.2 susceptible to and thus T lymphocytes.

Although these data suggest that approximately 44% of selectively recruited cells were B cells, the possibility has not been ruled out that some of the selectively recruited cells that resisted inactivation by anti-Thy 1.2 were null cells, macrophages, or T cells with little or no Thy 1.2 antigen on their surfaces. Since macrophages were almost completely eliminated from the nylon-column-separated donor pool, it would appear that the induction of selective recruitment does not require the presence of macrophages in the donor pool. This experiment does not, however, rule out the required participation of the recipient's macrophages in the process of selective recruitment.

Comment

Two important conclusions can be drawn from these studies: First, there are marked increases in the retention of circulating lymphoblasts in the lymph nodes draining the paws and lungs of mice challenged in the paws and lungs, respectively, by xenoantigens or alloantigens; second, there is some preferential retention in these lymph nodes of lymphocytes with specific reactivity to the antigen used for immunization. In experiment 1a, in which the

TABLE III. Characterization of Surface Membrane Markers of Selectively Recruited Lymphocytes by Using Labeled Donor Cells Enriched for the Presence of T or B Cells

Lymphocyte Subsets	^{3}H/^{14}C[1] R	^{3}H/^{14}C[1] L	R/L	dpm ^{3}H ($\times 10^{-2}$)	dpm SRL ($\times 10^{-2}$)
Unseparated[2]	6.68 ± 0.504	3.48 ± 0.186	1.92 ± 0.101	23.1 ± 3.95	6.6 ± 1.11
T Cell[3]	7.10 ± 0.214	2.86 ± 0.163	2.49 ± 0.080	21.0 ± 0.78	7.7 ± 0.48
B Cell[4]	6.41 ± 0.238	3.47 ± 0.131	1.85 ± 0.081	10.6 ± 1.46	2.9 ± 0.85

[1] Mice challenged in right paws with CDF and left paws with BDF cells. Anti-C3H lymphocytes labeled with ^{3}H and anti-B$_6$ lymphocytes labeled with ^{14}C (four mice in each group)

[2] Treated with normal mouse serum plus complement. Donor pool given to each recipient contained 315,000 dpm ^{3}H.

[3] Fractionated by nylon-column method. Donor pool given to each recipient contained 160,000 dpm ^{3}H.

[4] Fractionated by use of Thy 1.2 serum plus complement. Donor pool given to each recipient contained 315,000 dpm ^{3}H.

mice were injected in the paws with CRBC or SRBC, preferential recruitment was at least 70% of total recruitment.

The first conclusion is supported by experiments 1b, 2a, and 2b where there were sevenfold to eightfold increases in total recruitment of ^{3}H-labeled blast cells in the nodes draining sites of injections of xenoantigens or alloantigens as compared to nodes draining the sites of injections of HBSS. Others[5–7] have demonstrated similar, but somewhat lesser degrees (twofold to fourfold) of increased recruitment of ^{51}Cr-labeled resting lymphocytes in the nodes of challenged mice. In a previous kinetic study of lymphocyte recruitment to hilar nodes of mice challenged intratracheally with alloantigens, we showed that T lymphoblasts (ie, T lymphocytes that had recently synthesized DNA) were retained in the hilar nodes of challenged mice far more readily than were circulating resting T cells.[12]

The second conclusion is based on results obtained by an experimental protocol (ie, dual-antigen, dual-isotope assay) that has been developed and used in our laboratory for the past 12 years. With this assay we have clearly demonstrated selective recruitment of specific alloreactive lymphocytes to the paws and draining lymph nodes of mice challenged in the paws with semiallogeneic spleen cells, to the lungs and hilar nodes of mice challenged intratracheally with semiallogeneic spleen cells, and to the spleens, livers, and bone marrow of mice challenged intravenously with semiallogeneic spleen cells.[8,12,13] Others have used a similar assay to demonstrate the selective recruitment of specific alloreactive lymphocytes to skin allografts.[14,15] The critical data upon which our conclusion is based depend on the differences in mean ^{3}H/^{14}C ratios observed between lymph nodes of complementary experimental groups or between right- and left-sided lymph nodes. Evidence that these observed differences in ^{3}H/^{14}C ratios were due to selective recruitment and not to other possible mechanisms, such as thymidine reutilization, sequestration of dead cells, or sequestration of cells coated with antibody or antigen-antibody complex, has been cited in previous papers.[7,8,16,17] The author has also provided evidence in previous studies by attaining similar results when reversing the radioactive labels of the donor pools that the observed differences in ^{3}H/^{14}C ratios were not due to an unusual antigen-isotope interaction. Furthermore, the degrees of selective recruitment demonstrated in these studies were probably underestimated since a variable amount of background noise is unavoidable with the assay used. Sources of background noise include the inability to limit the uptake of isotope to lymphocytes that are responsive to only one alloantigen or xenoantigen and the possible cross-reactivity between the members of either pair of antigens. Others[18–20] have used functional assays to demonstrate selective recruitment of specifically reactive lymphocytes to lymph nodes. In contrast, Tilney and Ford[14] and Chang and Sugarbaker,[15] using dual-antigen, dual-isotope assays similar to ours, were unable to demonstrate selective recruitment to lymph nodes draining the sites of skin allografts.

The mechanism of antigen-induced recruitment of lymphocytes to lymph nodes is not fully understood, although recent evidence suggests that the increased traffic in challenged lymph nodes is related to the increased blood flow to them.[21–23] With regard to the antigen-induced recruitment of lymphocytes with specific reactivity, the fact that the lymph node is a site of lymphocyte recirculation and at the same time can also sequester antigen[24] suggests that antigen-specific recruitment results from the adsorption of specifically reactive lymphocytes to tissue-fixed antigen, ie, the in vivo counterpart to the in vitro phenomenon of selective adsorption of specifically reactive lymphocytes onto allogeneic fibroblast monolayers[25,26] or antigen-coated beads.[27,28] Thus nonspecific lymphocytes migrate through antigen-stimulated lymph nodes at a normal rate, but are increased in number because of the increase in delivery of these cells to the node. The specifically reactive lymphocytes also arrive in increased numbers due to the increased blood flow but are selectively retained by adhering to fixed antigen.

Lymphocytes are severely restricted in the number of specificities they can express and are widely distributed throughout an individual's recirculating lymphocyte pool. The recruitment of nonspecific and specifically reactive lymphocytes to lymph nodes draining the site of antigen deposition would appear to be a method of rapidly concentrating sufficient numbers of the various lymphocyte subsets required to initiate and sustain an immunologic response to the deposited immunogen.

Acknowledgment. The technical assistance of Fred Weintraub and Jeff Miller and the secretarial assistance of Marianne Gileno are gratefully acknowledged.

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Focal Adrenal Necrosis and Fibrosis

In a general autopsy population

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During the past year on the autopsy service of the Bronx Municipal Hospital Center, focal adrenal lesions were encountered on routine microscopic examination of glands submitted at random. The relative frequency of these incidental findings was striking when compared with previous reports; while focal adrenal necrosis and fibrosis have been given some attention in the past, large autopsy series have yielded very few positive cases.[1,2] Other studies have centered on retrospective correlations between such lesions and clinical events reflecting the patient's disease state.[3,4] The purpose of this study was to review the adrenal tissue submitted for postmortem examination during a two-year period ending December 1980 and to evaluate the nature and frequency of focal adrenal lesions in a general autopsy population. Our objective was to gain a better understanding of this "incidental" type of adrenal pathology.

Materials and methods

The results of 438 consecutive autopsies performed at the Abraham Jacobi Hospital of the Bronx Municipal Hospital Center during 1979 and 1980 were reviewed for study. Patients were included in the study when sufficient, well-preserved tissue adequate for analysis was obtained from one or both adrenal glands. Those patients whose adrenal glands could not be evaluated microscopically because of severe autolysis were excluded, as were patients whose adrenals had not been retained for microscopic examination. All tissue sections were taken at random from one or both formalin-fixed glands. Hematoxylin and eosin stained slides of each section were examined on separate occasions by three members of the Department of Anatomic Pathology. Trichrome stains of selected sections were used to demonstrate the presence of fibrosis.

The focal lesions encountered on microscopic examination were defined as follows:

- *Focal cortical infarction*—a discrete area of coagulation necrosis involving a portion of the adrenal cortex and surrounded by an acute inflammatory infiltrate.

- *Focal cytolytic necrosis*—changes in the morphology of cortical cells, ranging from complete loss of cytoplasm and nuclear outline to pyknosis or isolated loss of cytoplasmic outline, involving as little as one or two cells, and associated with a localized acute or chronic inflammatory response. The presence of inflammatory cells enabled us to distinguish true necrosis from the much more common changes of autolysis. Conceivably, necrosis may manifest itself as cell destruction without an inflammatory response in the initial stages; since necrosis and autolysis are morphologically indistinguishable by light microscopy, only lesions associated with inflammatory cells were described as cytolytic necrosis.

- *Focal fibrosis*—increase in stainable tissue collagen located within the adrenal cortex excluding capsular thickening. Focal fibrosis is described as replacement type or interstitial type, depending upon whether the increase in collagen occurs in an area of parenchymal cell loss or within the sinusoids surrounding seemingly viable cortical cells.

Results

Out of the 341 autopsies performed between 1979 and 1980, in which the adrenal glands were examined microscopically and found to be adequate for analysis, focal adrenocortical lesions were detected on random tissue sections in 41 patients (12%). Specific lesions involving the adrenal glands were found in five of these patients: one case each of amyloidosis and Hodgkin's disease, a large fibroma, and two cases of tumor metastases.

Focal lesions consisted of the following:

- Five instances of acute focal infarction (including one focus located in the vicinity of a micrometastasis) (Figs 1,2).

- Focal cytolytic necrosis in 21 patients (including the patients with Hodgkin's disease, amyloidosis, and adrenal fibroma) (Fig 3).

- Focal fibrosis in 19 patients. The corticomedullary junction was affected in eight cases, most often by replacement-type fibrosis (Figs 4,5).

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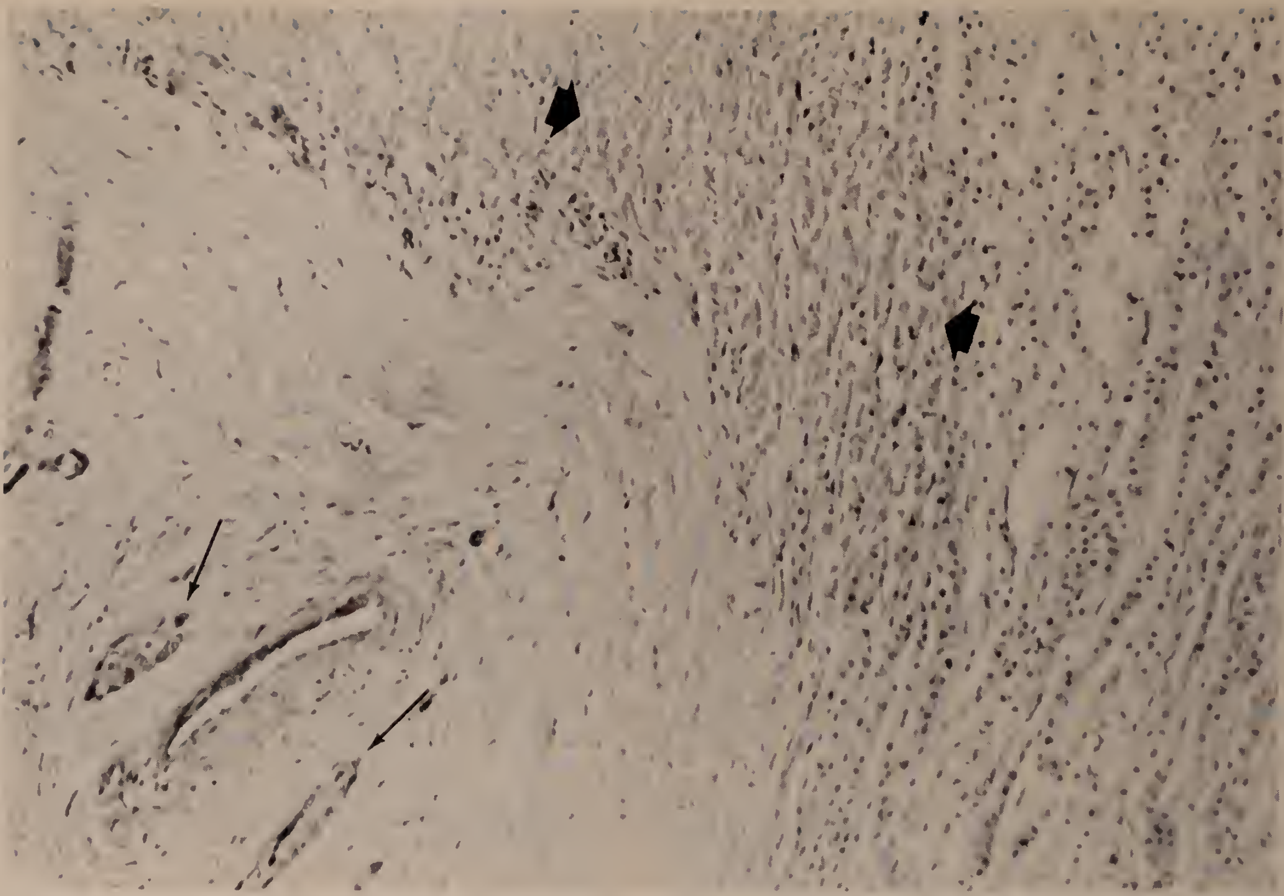


FIGURE 1. A focal area of early coagulative necrosis (wide arrows) is present just beneath the thickened capsule of an adrenal gland with metastatic carcinoma from the lung. Note the capsular vessels filled with tumor nests (thin arrows) in the region of cortical necrosis (hematoxylin and eosin ×75).

Associated pathologic findings in the affected adrenal glands consisted of abnormally thickened periadrenal arteriolar walls in 16 of 41 cases. Each of these 16 patients had hypertensive and/or arteriosclerotic cardiovascular disease evident at postmortem examination; in each case, the systemic disease was listed as a primary anatomic diagnosis, contributing to the patient's death. Nine of the 41 patients had diabetes mellitus.

Evidence of pulmonary embolization or infarction was noted in nearly half of the patients with focal lesions of the adrenal glands (17 out of 41). All together, nine of 41 patients had evidence of old or recent focal renal infarction, including two with cholesterol emboli seen within renal arterioles. An atherosclerotic plaque embolus was seen in only one periadrenal vessel (Fig 6). The adrenal gland in this case showed multiple foci of interstitial and replacement fibrosis, including one well-circumscribed area undergoing calcification. Fibrin microthrombi were observed in the periadrenal arterioles of two patients with focal adrenal lesions and in the central adrenal vein of the one patient with amyloidosis.

Comment

The earliest and, to date, largest autopsy study of focal adrenal lesions was undertaken by Angrist and Mitchell[1] in 1943 in another large municipal hospital. In their report, only 18 cases were observed in 3,080 patients (0.6%), and the majority of lesions consisted of focal acute coagulation necrosis (11 out of 18). Focal fibrosis was described in five cases as "collagenous scarring" or "rounded zones of fibrosis" and was believed to represent late stages of organization and healing of necrotic foci. No lesions suggestive of "interstitial-type fibrosis" were reported. Even the more easily detectable lesions of acute coagulation necrosis were found less than half as often as in our series of autopsies; this increase may indicate either a real change in prevalence, or it may reflect shifts in the disease profile affecting current autopsy populations. Five of the 18 patients in Angrist's series[1] had diabetes mellitus; thromboembolic disease was detected in the lungs of four patients. The degree and incidence of arteriosclerotic disease among these patients was not reported.

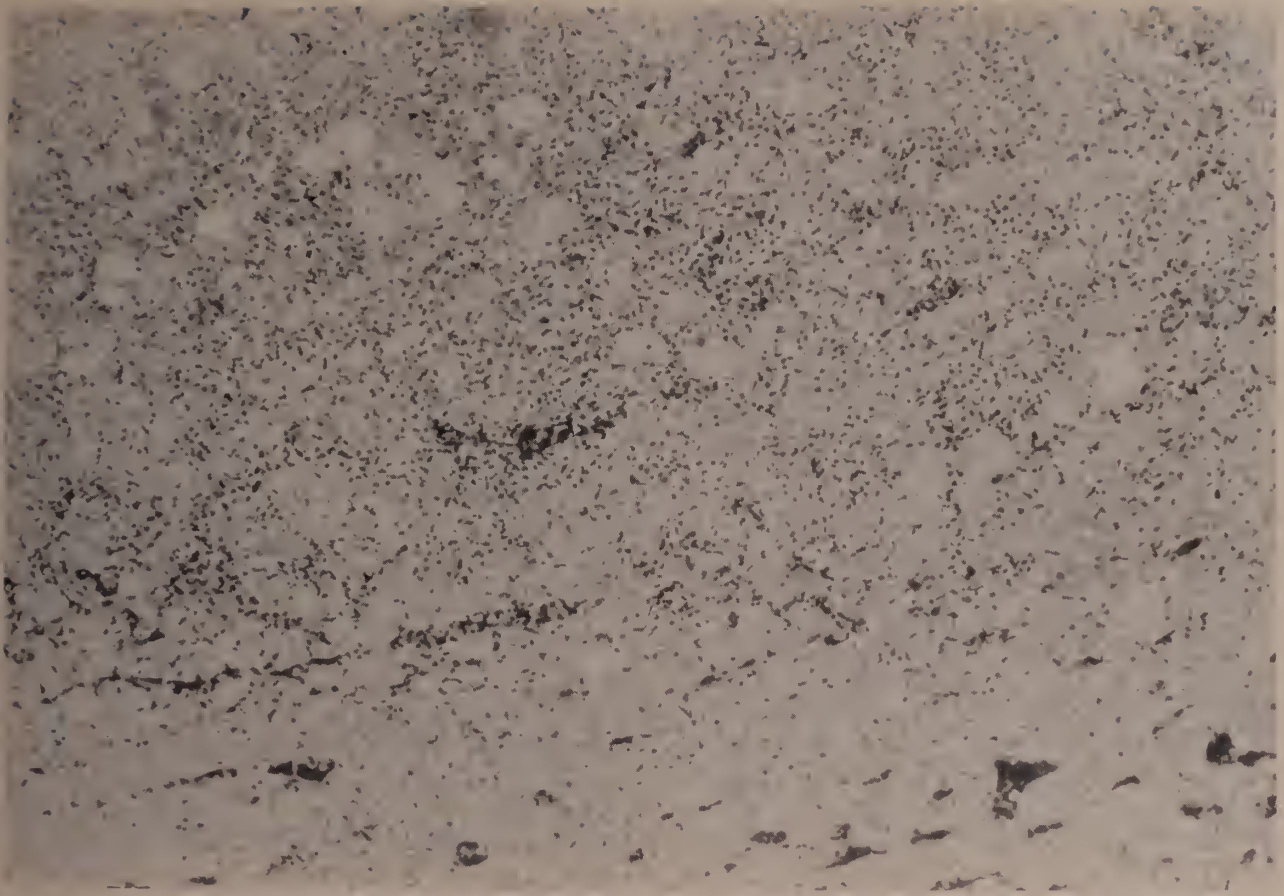


FIGURE 2. A large zone of focal adrenal cortical necrosis associated with a polymorphonuclear leukocyte infiltrate. The uninvolved glandular tissue is below (hematoxylin and eosin ×75).

In the 1950s, Hans Selye[5] described focal adrenal cytolysis as a typical manifestation of the "alarm reaction" in man as a response to stress; such changes were found most commonly in patients dying of systemic infection, wounds, or burns, but they were also noted in the "so-called disease of old age, arteriosclerosis." Selye ascribed these changes to excessive demands on adrenocortical function. In addition, he observed, as had Rich and others before him,[4] areas of partial or complete disintegration of parenchymal cell clusters, forming "lumina" or "tubular structures" surrounded by an inflammatory exudate. For Selye, these changes represented a peculiar type of holocrine secretion: In response to overstimulation, cortical cells could disintegrate and discharge their stored hormonal components into the bloodstream as a more rapid means of secretion. No further evidence of such holocrine secretion has been reported since, and more recent studies of focal adrenal lesions have failed to uncover any cases of "tubular degeneration."

The frequent finding of associated vascular disease or lesions in patients with focal adrenal necrosis and fibrosis suggests that ischemia or hypoxemia plays a role in the pathogenesis. Nearly 75% of our patients (30 out of 41) showed evidence of significant arteriosclerotic cardiovascular disease at autopsy, and 17 out of 41 had evidence of pulmonary thromboembolism. Other than vessel-wall sclerosis, specific vascular occlusion (ie, microthrombi, cholesterol emboli), was found in four patients in the random tissue sections examined.

An association between focal necrosis and transient organ hypoperfusion was suggested by one retrospective study.[3] The authors established a correlation between acute renal failure, hypotension and shock, and the presence of adrenal corticomedullary junction necrosis; they also noted an association with lesions of acute renal tubular necrosis and centrilobular necrosis of the liver. The cells at the corticomedullary junction are thought to be more susceptible to ischemia because they are farthest from the periadrenal arterial bloodstream. We frequently observed cases of replacement-type fibrosis occupying the corticomedullary junction, possibly representing scars of previous necrosis. However,

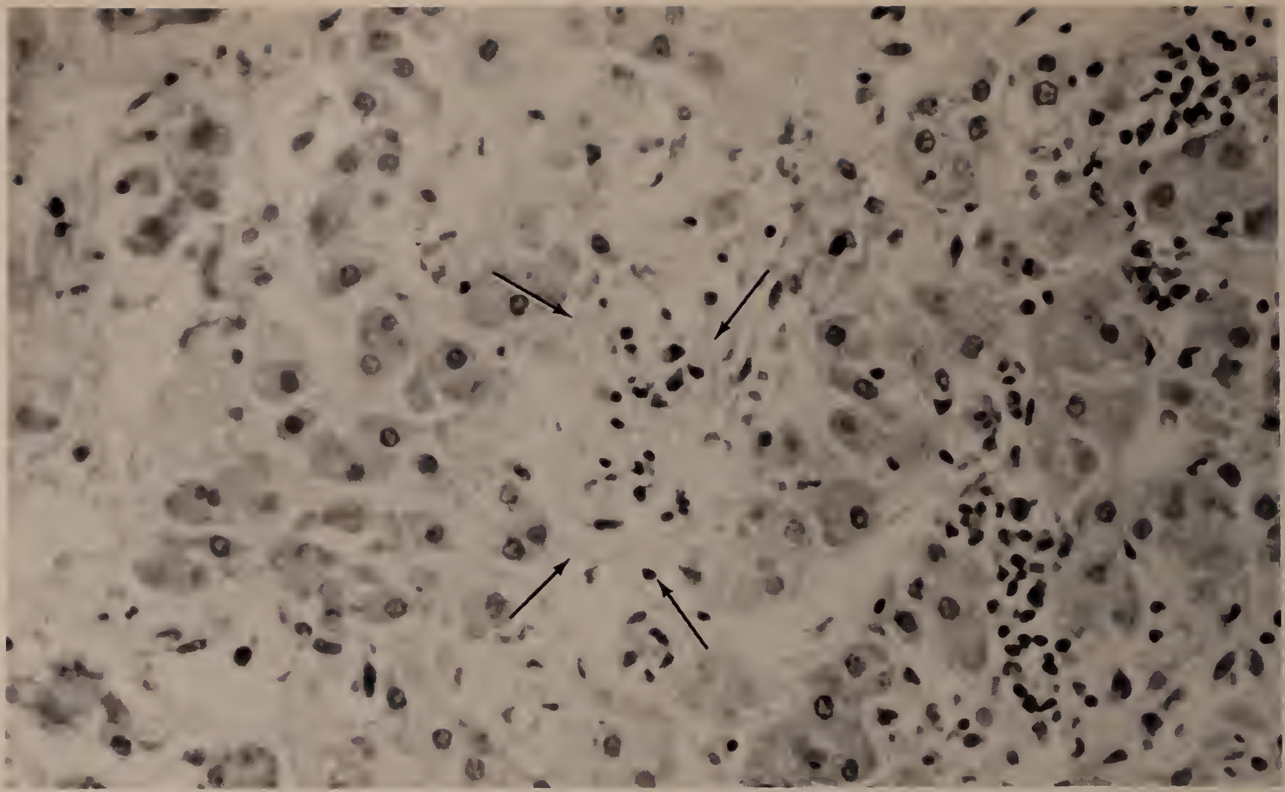
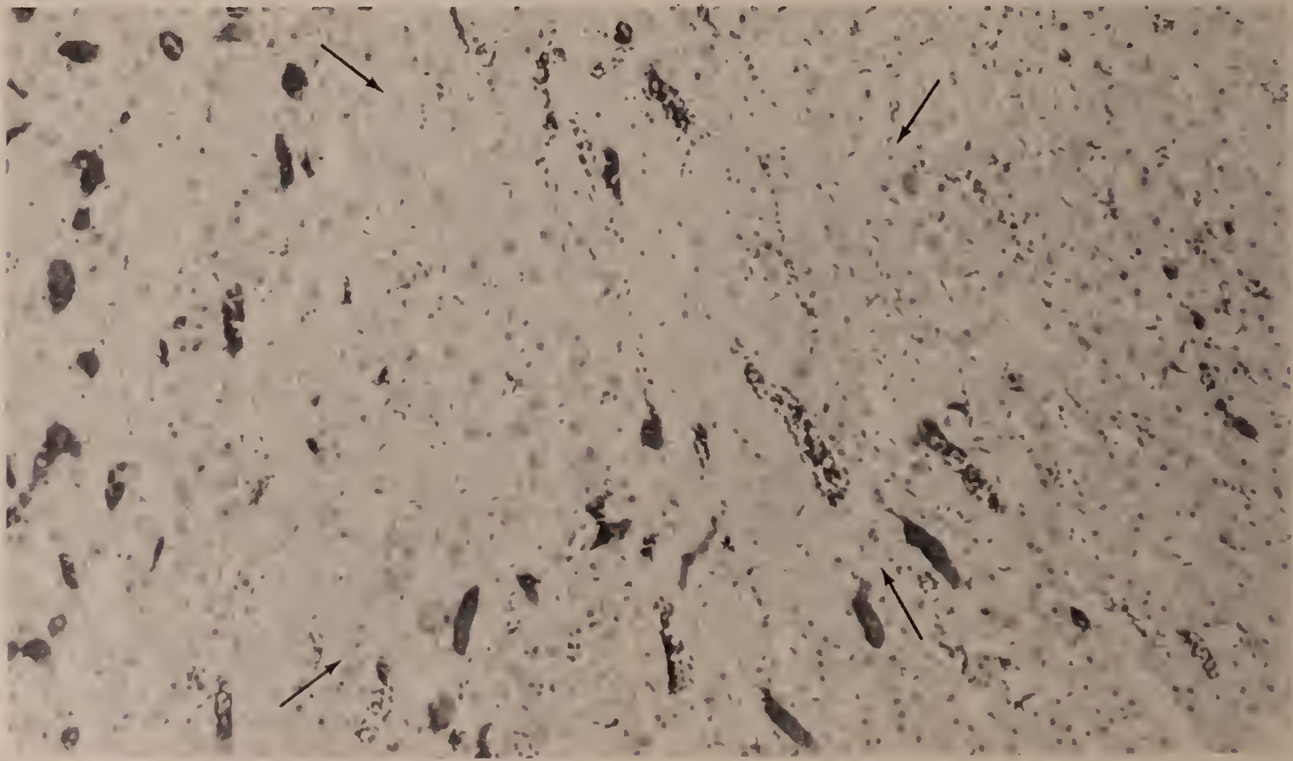


FIGURE 3 Focal cytolytic necrosis (arrows)—in which single adrenal cortical cells or groups of them undergo destruction associated with a chronic inflammatory cell response—was the most common degenerative lesion in this study (hematoxylin and eosin ×180).

FIGURE 4 An area of focal replacement-type fibrosis (arrows) is seen in this adrenal cortex. The outlines of the cortical cells replaced by connective tissue may still be appreciated. This form of fibrosis may occur following episodes of prior focal cytolytic necrosis (hematoxylin and eosin ×75).



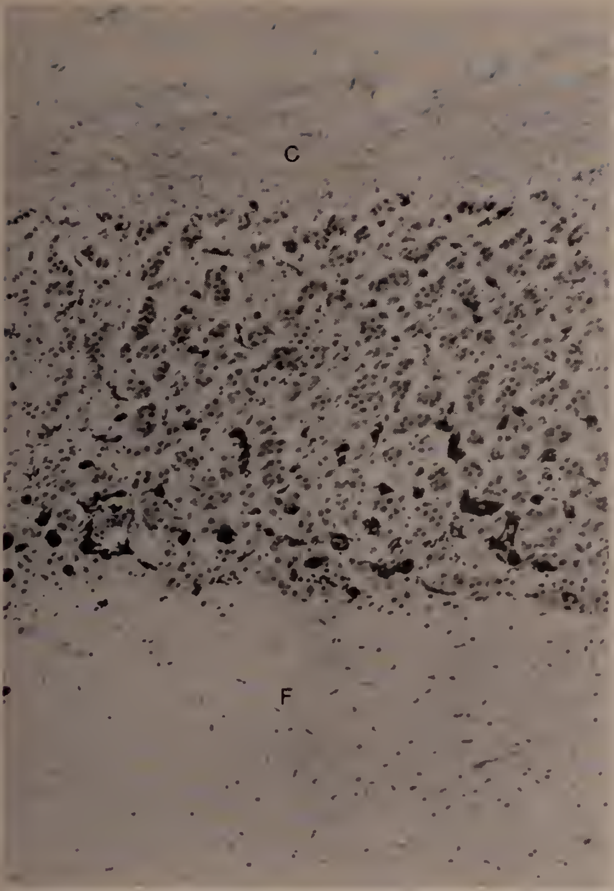
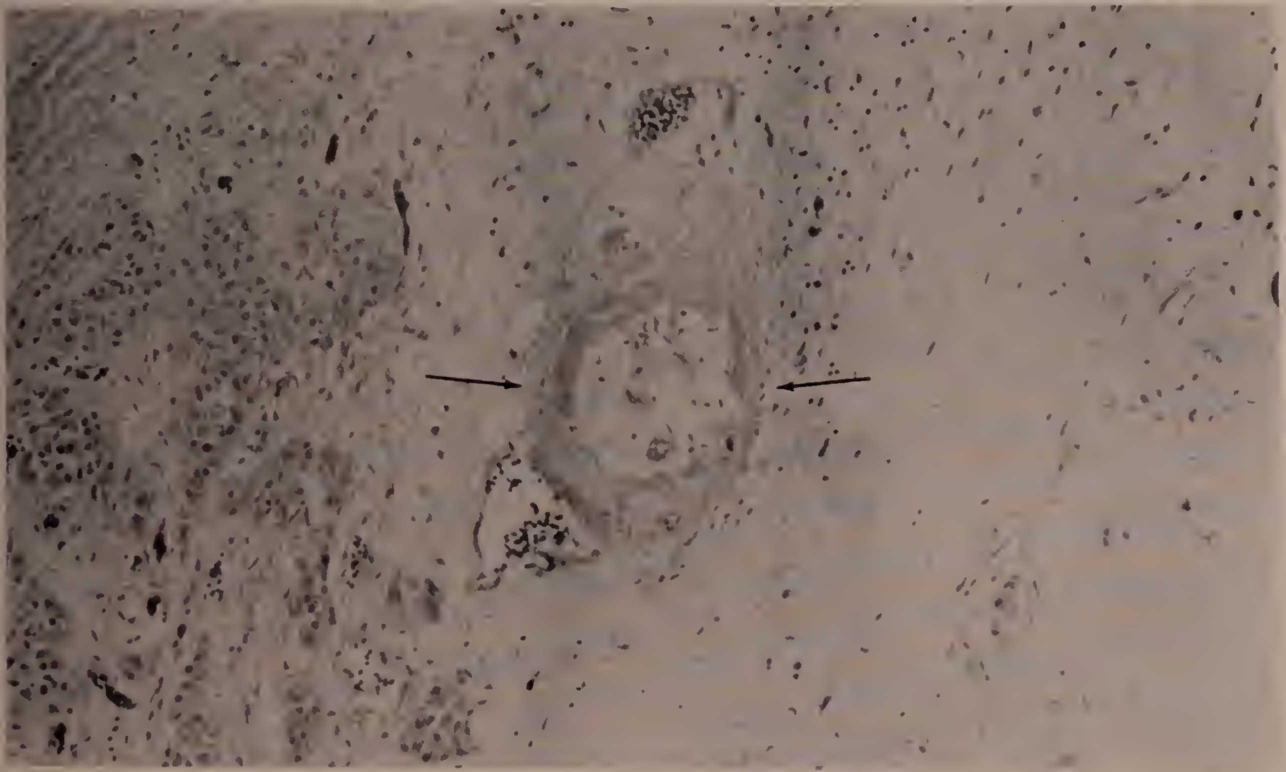


FIGURE 5 A dense, relatively acellular band of focal fibrosis (F) is noted at the corticomedullary junction. The medulla is out of the field below. In this region, the adrenal capsule (C) is thickened, and interstitial, sinusoidal fibrosis is present (hematoxylin and eosin ×75).

retrospectively, the clinical presence of shock or hypotensive episodes could not be substantiated in many of our cases. (Moreover, we feel that the diagnosis of acute tubular necrosis cannot be made on histologic grounds post mortem with any degree of confidence because of artifacts due to autolysis.)

Nonetheless, focal necrosis of the adrenal cortex has been produced experimentally in rabbits following orthostatic collapse.[5] The changes mostly involved the zona fasciculata and consisted of cytolysis with an acute or chronic inflammatory response resembling the lesions described in our series. Animals were sacrificed at intervals ranging from several hours to 30 days following a single episode of orthostatic hypotension. Necrosis was present after six hours and was most conspicuous at 24 hours. This experiment may offer one explanation for the apparent increase in frequency of focal adrenal lesions in our series compared with previous studies. Thanks to current methods of cardiopulmonary re-

FIGURE 6 A periadrenal vessel (arrows) with a hyalinized wall contains a collection of foamy histiocytes within its lumen, most likely representing embolization from an aortic atherosclerotic plaque. An extracapsular adrenal cortical nodule to the left shows evidence of degeneration and fibrosis (hematoxylin and eosin ×75).



suscitation and advanced cardiac life support, including temporary intravenous pacing and vasoactive adrenergic drugs, patients with major hemodynamic imbalances, who might otherwise have succumbed, are being maintained alive for periods ranging from hours to days. On one hand, this "delay" may allow for the progression of ischemic changes into recognizable microscopic lesions, including inflammatory responses and fibrosis. On the other hand, as vasoactive drugs are known to alter the state of organ perfusion, focal adrenal lesions may actually be induced by resuscitative measures.

Prospective studies involving patients on advanced cardiac life-support systems might shed some light on the pathogenesis of focal adrenal cortical lesions. It will also be necessary to assess any, as yet undiscovered, functional adrenocortical impairment that results from these degenerative alterations. Although the cause of these adrenal lesions remains unknown, we believe that the increased frequency identified in our study is a real phenomenon that does not reflect simply a greater awareness of these relatively subtle lesions.

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The stress on research in our medical schools and hospitals has emerged from the relatively recent ready availability of the research grant. The balance can be restored by equivalent grant support for the autopsy and its own unique type of scholarship. Experimental research and the autopsy are neither mutually exclusive nor competitive; we can afford to support both, with cross-fertilization, and with advantage to all of medicine and medical care.

The autopsy is the focal point for integrating all sources of knowledge bearing on disease, a "stable chemical end-point" from which to initiate the reasoning back to the beginnings of an illness. The pathogenesis is often revealed by autopsies done at different stages of a disease. The autopsy helps to bridge the widening gap between rapidly advancing fundamentals in science and what is now being done for the patient, and offers an opportune means of seeing the patient in full perspective and as a whole. The autopsy brings back to medicine the former status of bedside teaching, and puts the laboratory in proper perspective. Realistic interest in the patient goes with appreciation of the autopsy and vice versa.

ALFRED A. ANGRIST
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Cytochemical Studies on Cell Organelles

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When, in 1955, I was invited by Dr. Alfred A. Angrist to join the Department of Pathology at the Albert Einstein College of Medicine, I had just begun working in the field of histochemistry and cytochemistry. Dr. Angrist encouraged me to use cytochemical techniques to study cell organelles during pathologic change. He also suggested that other members of the department might want to learn these procedures in my laboratory.

This was before electron microscopy became widely used. The cytochemical techniques were extremely simple. Freely floating sections were incubated in media that were intended to visualize specific cell organelles by virtue of enzyme activities localized in each. These organelles included (1) the plasma membrane, (2) mitochondria, (3) lysosomes, (4) GERL†, (5) endoplasmic reticulum, (6) the Golgi apparatus, (7) peroxisomes, and (8) microperoxisomes.

In our early work we usually used frozen sections of tissue fixed overnight, at 4°C, in 4% formaldehyde-calcium[1–3]; the sections were made on a sartorius microtome at 10 μm. Today, we employ as high a glutaraldehyde concentration as the enzyme (or antigen) will tolerate. (Gamma-glutamyl transferase has been localized in the plasma membrane by an immunocytochemical procedure.[4] Cultured cells (eg, 3T3-L1 cells[5]) or nonfrozen sections are employed. The sections are made with the Oxford Vibratome (tissue "chopper"). Except for the mitochondria, all organelles could be studied by the electron microscope as well as the light microscope with the methods that we chose or developed. These procedures are listed in the Table, based on Reference 1.

. . .I am happy to join in this tribute to Dr. Alfred Angrist. Without his courage and wisdom my work would have been impossible.

Cytochemical Marker Enzymes

Organelle	Enzyme
Endoplasmic reticulum	
(in some cell types)	Nucleoside diphosphatase
(in a few cell types)	Peroxidase
GERL and lysosomes	Acid phosphatase
Peroxisomes, including microperoxisomes	Catalase
Golgi apparatus	Thiamin pyrophosphatase
Mitochondria	Enzymes, coenzymes that oxidize 3,3′-diaminobenzidine NADH-tetrazolium reductase
Plasma membrane	Nucleoside phosphatase

At the beginning of our work, it was essential to validate staining reactions for localizing enzyme activities. One of our studies employed an enzyme in the endoplasmic reticulum, nucleoside diphosphatase. We compared its hydrolytic properties as a purified enzyme with its activity in frozen sections.[2,6] As Figure 1 shows, the enzyme activity is highest near pH 7.4 and in the presence of bivalent cations. As far as can be assessed, the enzyme's properties are essentially the same in sections as when purified.

Historically, the most significant of our studies were the staining results for acid phosphatase activity.[7–9] They helped establish the cytologic identity of lysosomes in rat liver and the ubiquity of the organelle in animal and plant cells. Another organelle whose ubiquity was established by cytochemistry is the microperoxisome.[10,11]

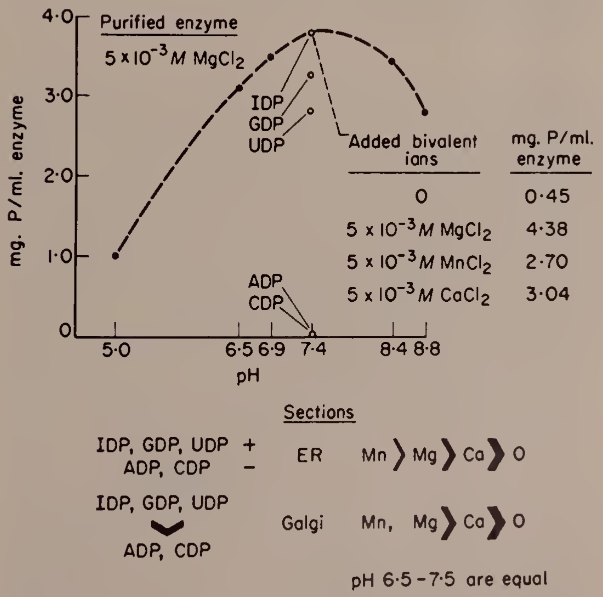

FIGURE 1. Nucleoside diphosphatase activity of purified enzyme from rat liver, using inosine diphosphate as substrate. Below, representation of levels of staining reactions in endoplasmic reticulum and Golgi apparatus, including effectiveness of bivalent cations.

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† An acronym for a hydrolase-rich region of ER, spatially related to the Golgi apparatus (but not part of it) from which lysosomes appear to form.

Supported in part by grants from the National Cancer Institute, National Institutes of Health (CA-06576 and CA-14923), and the American Cancer Society (E32 and CD-125B).

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Figure 2 is a section of rat liver that shows lysosomes (by staining for acid phosphatase activity) and peroxisomes (by staining for catalase).

In a 1973 review,[7] I considered what the effect on the development of the lysosomes and peroxisome fields would have been if valid cytochemical procedures for these organelles had been available in the early 1950s.[7,12] For example, we could have described the distribution of lysosomes and peroxisomes both intracellularly and among the various cell types and tissues.

I will refer to two other organelles listed in the Table: the Golgi apparatus and GERL. The marker used for the innermost or "trans" element of the Golgi apparatus is nucleoside diphosphatase activity (also referred to as thiamine pyrophosphatase, or TPPase). Adjacent to this element is GERL, a hydrolase-rich organelle from which some types of lysosomes appear to develop. The distinction between the Golgi apparatus and GERL is discussed by A. B. Novikoff and P. M. Novikoff.[13]

I wish to close by referring to a recent study of rat kidney in my laboratory that again demonstrates the value of cytochemistry. Figure 3 is an electron micrograph from Novikoff, Spater, and Quintana,[14] showing a nonfrozen section incubated for IDPase activity and examined with the electron microscope, using so-called thick sections (approximately 0.25 μm thick). The three-dimensional aspects of the endoplasmic reticulum are revealed, including its characteristic fenestrations.

Included in the pathologic states we have studied are hepatomas, melanomas, chronic idiopathic jaundice, lipofuscin accumulation, sperm infertility, rheumatoid arthritis, nerve crush, bile nephrosis, nephrotic syndrome, and hydronephrosis.

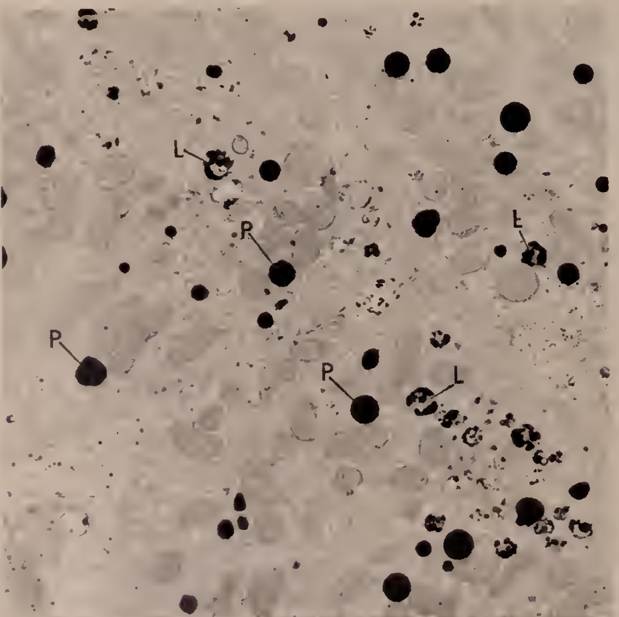

FIGURE 2. Section of rat liver showing stained lysosomes (L) and peroxisomes (P) (X 9,700).

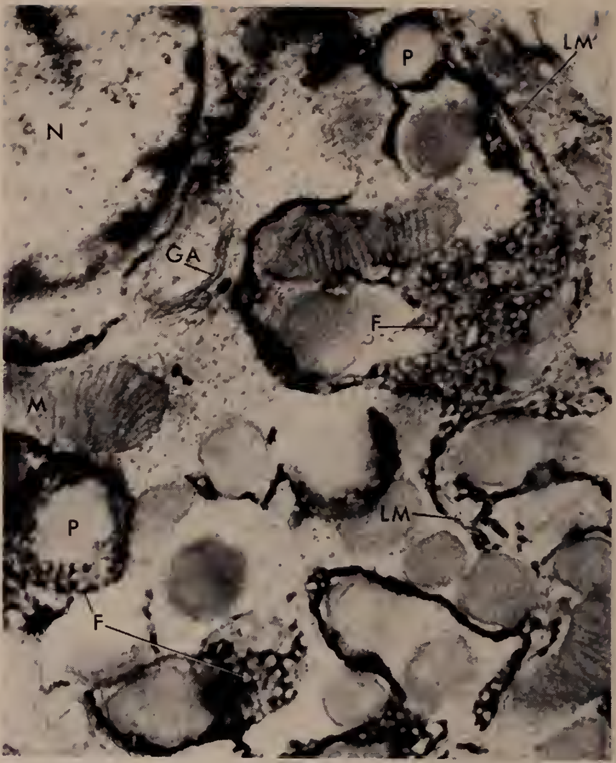

FIGURE 3. A "thick" section (0.25 μm). Reaction product (lead phosphate in the endoplasmic reticulum (ER) produces a strong contrast with other structures. Fenestrated areas of the ER are seen at F. The edge of the cell is indicated by LM. Also labeled are Golgi apparatus (GA), peroxisomes (P), and a mitochondrion (N). The peroxisome at the left illustrates the manner in which it is enveloped by the ER (X 28,000).

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Mitral Anulus and Valvular Calcification

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Calcification of the mitral anulus and valve leaflets is commonly found in the elderly, particularly in females. For the most part, such lesions are an incidental finding at autopsy, yet in some instances this condition may cause valvular functional disturbance,[1-4] heart block, and embolism when the calcium masses are exposed to the bloodstream. These lesions are detectable by x-ray examination, fluoroscopy, or echocardiography,[4] and an assessment of their clinical significance becomes essential with the advance in testing technology. Mitral annulus calcification is generally regarded as an age-related degenerative process, because its incidence increases with age, particularly in postmenopausal females; there is a lack of close association with rheumatic carditis or other inflammatory processes.[3,5,6] Although capillary-type vascularization and chronic inflammatory cell reaction are present, most cases encountered show a lack of active inflammatory reactions and the infectious process has been ignored.[6] Based on our past experience in studying the healing processes of infectious endocarditis and nonbacterial thrombotic endocarditis (NBTE),[7-10] similarities are noted in the tissue reaction surrounding mitral anulus calcification and valvular calcification in some cases, although an active infection in the former rarely has been demonstrated.[5,11,12] This study deals with the variation in mitral anulus and valve calcification in defining the characteristics of the infectious process and its sequelae, enabling one to differentiate it from degenerative calcification. The role of the superimposed infectious process in the progress of calcification is proposed and elaborated upon.

Materials and methods

Material reviewed included a total of 54 cases of mitral anulus calcification, with or without valvular calcification, collected from autopsy records, mostly from 1976 to 1979, and 24 cases of valves removed surgically at the North Shore University Hospital.

The autopsy cases were divided into two groups, based on clinical history, for comparison purposes: (1) mitral anulus calcification without a history of infectious endocarditis (37 cases) and (2) another group of 17 cases with a clinical history of suspicious or proved previous infectious endocarditis. The surgically removed valves included infectious, noninfectious, and healed infectious cases. Tables I and II show the age and sex distribution and the basic diseases, respectively, in autopsy material.

In addition to hematoxylin and eosin stain, Gram's stain, von Kossa for calcium, PTAH (phosphotungstic acid hematoxylin), van Gieson's elastica, and trichrome stains were performed when the necessity arose.

Observations

Cases without previous infectious endocarditis. Clinically, a majority of this group of cases revealed chronic heart failure associated with atherosclerotic heart disease, with or without a rheumatic history, aortic or mitral stenosis and insufficiency, renal failure requiring dialysis, and malignant tumor (Table II).

In the majority of cases in this group there was cardiomegaly with left ventricular hypertrophy; the heart weighed over 500 g in six of 11 males; in three cancer patients the heart weight was under 500 g. In females, 18 of 26 cases showed a heart weight of over 400 g; in four of eight cancer patients, the heart weight was under 400 g.

Histologically, the features of calcification can be roughly divided into three categories: The first category involves a mass of solid calcification with a well-delineated border, which is surrounded by hyalinized collagen, as shown in Figures 1 and 2. In some instances, calcium deposits of various sizes comprise a large mass, which is surrounded by delineated borders; a few cell infiltrations are present. The second category includes calcium deposits in scattered fashion, irregular in shape and size, without a delineated border. These deposits are surrounded by loose connective tissue with a capillary type of vascularization, inflammatory cell reaction, and granulation tissue, which is usually seen in healing or healed infectious endocarditis (Fig 3). A few cases with valvular calcification belong to this category.

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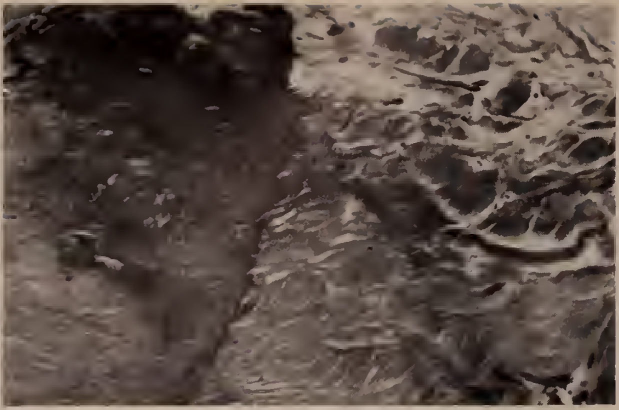


FIGURE 1. Mitral anulus calcification from a 65-year-old male with lupus nephritis requiring dialysis in past six months. The border of calcification is well delineated from the surrounding tissue degenerative calcification (hematoxylin and eosin stain ×4).

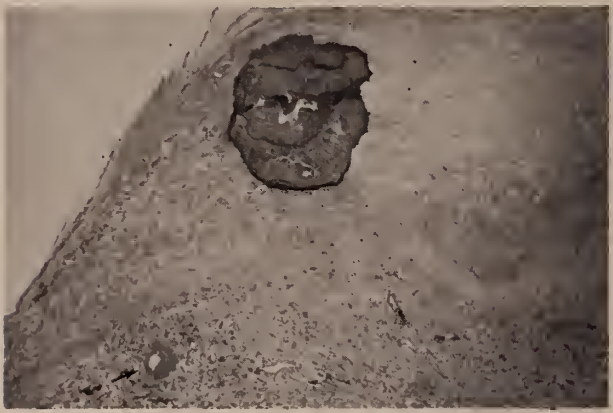


FIGURE 2. Mitral valve calcification from a 71-year-old male with a history of rheumatic fever. Well-demarcated calcification in the thickened valve (degenerative calcification). Muscular type of vessel (arrow) is noted, which is in accord with the clinical history of rheumatic fever (hematoxylin and eosin stain ×6).

Mitral anulus calcification, for the most part, contains degenerative calcification as the core of more extensive calcification, which in turn may be associated with irregular calcium deposits surrounded by granulation tissue. The third category is a mixture of degenerative masses of calcium with delineated borders and scattered calcium deposits in granulation tissue (Fig 4).

In 15 of 37 cases, the mitral anulus calcification was justified as true degeneration (the first category); 20 of 37 cases were a mixed type (third category); and the classification of two cases was undetermined. Calcium deposits in the mitral valve (five of 16 cases) were classified as belonging to the second category. Aortic valve calcification, which was noted in 27 of 37 cases with mitral anulus calcification, was mostly a degenerative type and was located at the fibrosa aspect. In only a few cases did the calcification appear at the spongiosa (ventricular aspect); either the calcification extended from the fibrosa or originated at the spongiosa and was located at the free edge or line of closure.

Cases with clinical history of suspicious or proved infectious endocarditis. The majority of cases in this group also exhibited cardiomegaly: In five of seven males, the heart weighed over 500 g, and in seven of 10 females the heart weighed over 400 g.

Histologically, this group of cases included patients with healed or healing and active infectious endocarditis with mitral anulus or valvular calcifications. Calcification or calcium deposits were noted even in active infectious cases in the necrotic valve, as seen in Figs 5 and 6.

When the active infection subsides, the infected valve is made up largely of granulation tissue with foci of calcium deposits, which are irregular in shape and size and are seen in a scattered distribution (Fig 7). This granulation tissue becomes more fibrotic as the inflammatory cell reaction decreases and the capillaries become more dominant as the healing

TABLE I. Distribution of Patients by Age and Sex

	Females			Males			Total
Age (yrs)	<65	65–79	>80	<65	65–79	>80	
No infection	6	11	10	0	10	1	38
Infectious	3	4	3	2	4	1	17

TABLE II. Basic Diseases in Patients*

	RHD	Malignancy	ASHD	Hypertension	Renal Failure	Others
No Infection	12	11	6	7	6	9
Infectious	5	5	3	2	7	4

* Including cases with multiple basic diseases

† Renal failure with dialysis

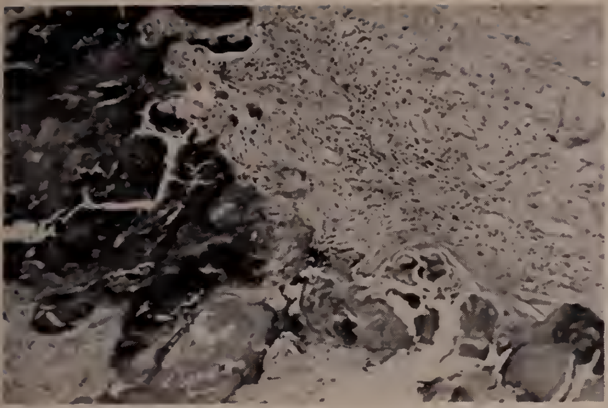


FIGURE 3. Mitral anulus calcification from the same patient as in Fig. 2. Irregular calcification is noted at the left side of photograph. Capillary type of vascularization with a few cell infiltrations present in the right side and left lower corner of photograph (hematoxylin and eosin stain ×10).

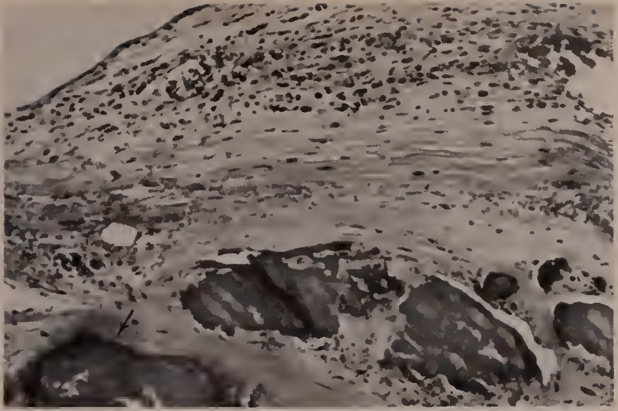


FIGURE 4. Mitral annulus and subvalvular calcification from a 77-year-old female with a history of rheumatic fever. Calcification of lower left (arrow) seems to be the degenerative core of this massive calcification. Irregular calcification with a few cell infiltrations is noted toward right. Dense cell infiltration (upper portion of photograph) is the base of posterial leaflet (hematoxylin and eosin stain ×16).

process progresses (Fig 8). The capillary network remains even after the other components of the inflammatory reaction subside completely.

Two cases displayed calcium embolism in the intramural vessels (Fig 9); both cases had softening of mitral anulus calcification and calcium deposits on the surface of the mitral valves.

Surgically removed heart valves. Calcium deposits or massive calcification in the fibrosal aspect of the aortic valve usually shows a linear border with or without a scanty capillary type of vascularization and foamy cells. Calcium deposits in the mitral valve tend to accompany granulation tissue in cases with a history of suspicious or diagnosed infectious endocarditis. Calcium deposits in the thickened valve distorted by collagen display a linear border, demarcating them from the surrounding tissue.

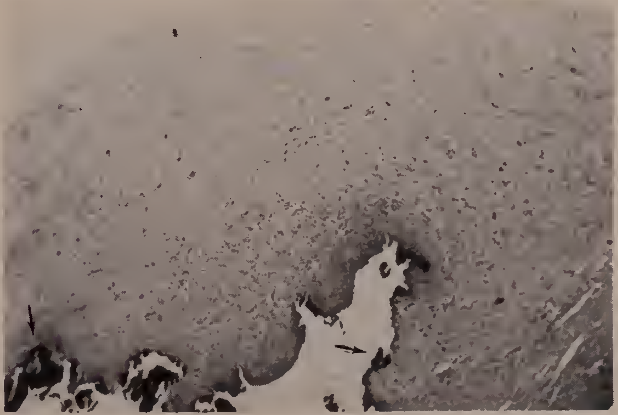


FIGURE 5. Mitral valve, posterior leaflet, from an 84-year-old female with a history of rheumatic fever and renal failure, requiring dialysis for 18 months. Infectious endocarditis was treated with antibiotics. Calcium deposits (arrows) are partially torn from edge of valve. The valve leaflet is thickened and is made of granulation tissue (healing endocarditis). Note the capillary type of vascularization (hematoxylin and eosin stain ×4).

Comment

The results of this study and past experience in the study of infectious endocarditis and NBTE[7–10] indicate that the histologic findings of mitral anulus calcification and calcification of valve leaflets have similarities. They are not always exclusively age-related, true degenerative phenomena, but a considerable number of such cases are related to superimposed infection of some sort. Mitral anulus massive calcification is initiated with a degenerative process, as other investigators have emphasized,[3–6,14] and the infectious process seems to accelerate or extend the calcium deposit. There is an increase in ground substances, which then undergo degenera-

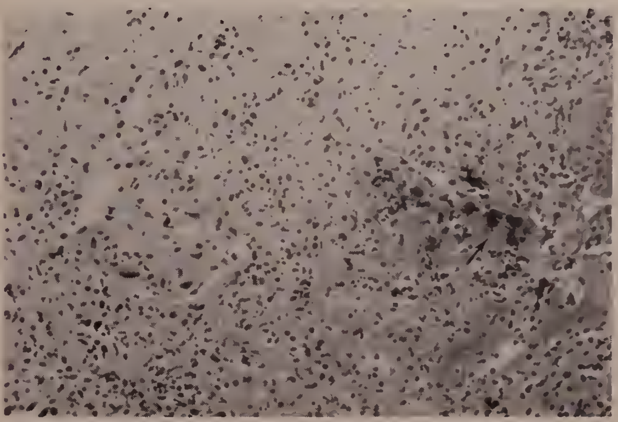


FIGURE 6. Same patient as in Fig. 5; base of valve leaflet, calcium deposits (arrow) are noted in the necrotic area of active inflammation (hematoxylin and eosin stain ×16).

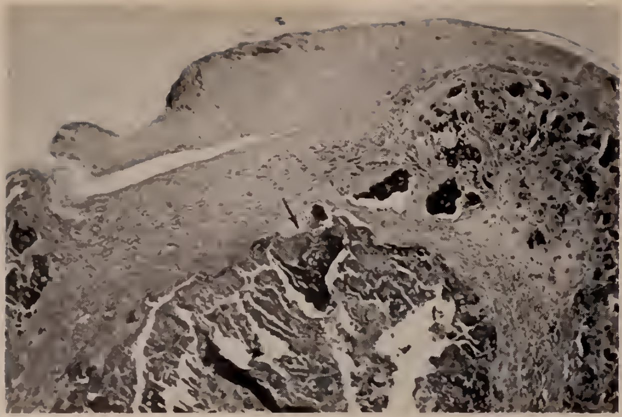


FIGURE 7. Mitral anulus calcification from a 72-year-old male with renal failure requiring dialysis for three years. The proved infectious endocarditis was treated with antibiotics. A large calcification (arrow) is soft, and scattered irregular calcification is surrounded by granulation tissue. Calcium deposit is also noted in the valve leaflet. This case displays calcium embolism in the myocardium (hematoxylin and eosin stain ×4).

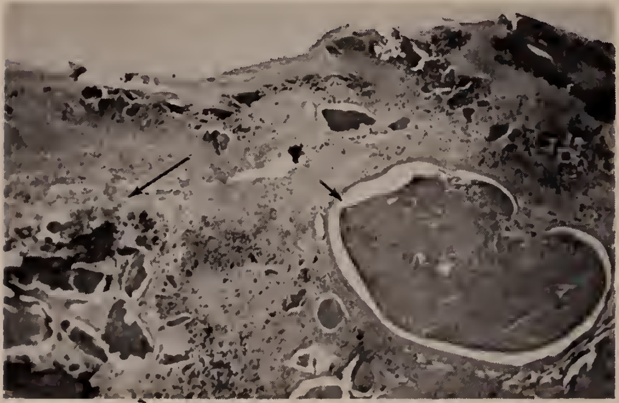
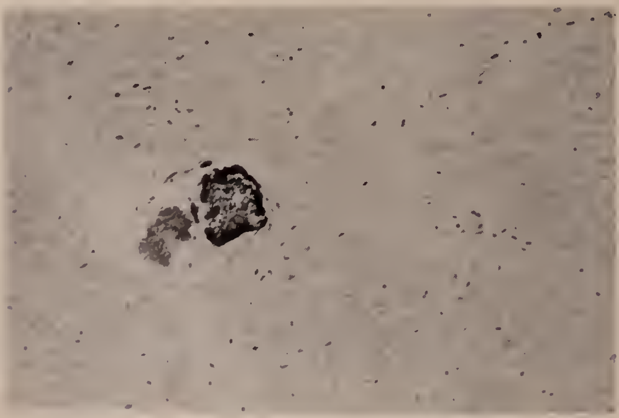


FIGURE 8. Mitral anulus and subvalvular calcification from an 84-year-old female with thyroid carcinoma, hypertension, and asymmetric septal hypertrophy. Infectious endocarditis was treated five months previously. A large solid calcification is demarcated by fibrous tissue (shorter arrow), and irregular calcium deposits are surrounded by granulation tissue in the mitral annulus that extends to subvalvular area (longer arrow) and valve. The calcium embolism is noted in Fig 9 (hematoxylin and eosin stain ×4).



tion. These processes, associated with an inflammatory reaction as well as other factors, could enhance the deposit of calcium, even though nonaltered acid mucopolysaccharides inhibit its precipitation.[5] Cell reaction alone may be interpreted as a nonspecific reaction, but when a persistent capillary type of neovascularization coexists, it can hardly be interpreted as merely nonspecific or as a result of foreign-body reaction. Healing and even well-healed infectious endocarditis constantly shows a capillary type of vascularization. On the other hand, no such persistent capillary vascularization is noted in healing or healed NBTE, unless associated with bacterial contamination, as shown in Figure 10.

In cases involving old rheumatic valvulitis and deformed valves with renal failure requiring hemodialysis or peritoneal dialysis, one must consider the possibility of antecedent infectious endocarditis or infection of some sort, even though this is not always clinically detectable and has often been overlooked.

Sell and Scully deduce from the results of their studies that "although no specific conclusions are justified as yet, it is likely that degenerative changes in the collagen fibers, alteration in the ground substance, and an accumulation of lipids are all intimately related to progressive calcification of the cardiac valve."[5] Their statement is well taken, and our results also confirm it, except for adding that infectious factors may contribute to the progress of calcification in many cases: scattered calcium deposits accompanied by capillary neovascularization with inflammatory cell reaction in addition to the well-demarcated massive calcification.

Pomerance[6] studied 258 cases of mitral anulus calcification and found nonspecific chronic inflammatory changes adjacent to the calcium in about half the cases in both sexes. She concluded that there was no evidence of previous endocarditis responsible for mitral ring calcification and neither did parity influence its incidence. However, she also noted inflammatory changes around the calcified mass and that they varied from a few dilated vascular channels with scanty lymphocytes and plasma cells to dense cellular infiltration, including numerous polymorphonuclear leukocytes, which extended between the myocardial fibers of the posterior wall for several millimeters. Particularly, Figure 11 in Pomerance's paper[6] does not look like merely nonspecific cell reaction to the calcium deposit. Nonspecific chronic inflammation was also noted by Rosenthal and Feigin,[15] and she stated that similar inflammatory changes in the valve cusp do not appear to have been recorded previously. As a matter of fact, such a

FIGURE 9. Same case as in Fig 8; von Kossa stain demonstrates calcium embolism in the myocardium (von Kossa stain ×16).

TABLE III. S^{35} Incorporation of Thoracic Aorta in Control and Hypertensive Rats (in Vitro)

4 mos	Control	Hypertensive	Ratio Control:Hypertension
Female	34 (19–60)*	566(300–837)*	1:17
Male	40 (13–57)*	126 (28–230)*	1:3
8 mos			
Female	8 (3–11)*	383 (249–499)*	1:48
Male	45 (31–68)*	452 (422–480)*	1:10

* DPM/mg tissue wet weight in average of four rats

capillary type of vascularization with lymphocytic infiltration in the valve cusp has been emphasized as one of the features of healed infectious endocarditis.[10]

The etiology of massive calcification in the mitral anulus fibrosus of postmenopausal females is not clear. Although a hormonal theory has been suggested, there is no established correlation between the development of mitral anulus calcification and the effects of female hormone. It is worth pointing out the sex difference in the biosynthesis of ground substances in experimental hypertensive rats (Table III).[16] In the aorta of female rats with sustained hypertension, the incorporation of S^{35} increases significantly as compared with their counterpart, male hypertensive rats. In older female hypertensive rats (those over 8 months of age), there is an increase in S^{35} incorporation which is 48-fold as compared with the control (normotensive), while the male hypertensive rats' increase is ten-fold as compared with the control. These data indicate that the biosynthesis of acid mucopolysaccharides in old female rats is more active than in male rats in responding to sustained hypertension. Such susceptibility in the biosynthesis of acid mucopolysaccharides may be applicable to the mitral anulus fibrosus, which in humans is rich in acid mucopolysaccharides in youth and decreases with age. Work overload and other factors cause an alteration resulting in an increase of acid mucopolysaccharides and other ground substances. All of this creates conditions suitable for the absorption of calcium. The altered collagen in a thick valve and the necrotic area of an infected valve tend to show calcium deposits, as is commonly observed in our daily practice.

Calcium embolism in mitral anulus calcification is uncommon.[17] Two cases in this series show calcium emboli in the myocardium. One patient was post aortic valve prosthesis and the other was combined with valvular calcium deposits. When mitral anulus calcification extends to the valve cusp or to the endocardium, particularly when it is soft, the calcification could be hazardous in valve prosthetic surgery. Therefore, accurate diagnosis and evaluation of mitral anulus and valvular calcification could prevent an unexpected complication and difficulty in open heart surgery procedures.

Summary

A total of 54 cases of mitral anulus calcification, with or without associated valve calcium deposit in autopsy material, and 24 cases of surgically removed valves were studied to analyze the nature and characteristics of calcification. One group of 37 cases without any clinical history of previous infectious endocarditis and another group of 17 cases with clinically suspicious or proved previous infectious endocarditis were included. The surgically removed valves included active and healing infectious endocarditis and noninfectious atherosclerotic calcification.

Histologically, the first group of cases can be divided into the following categories: (1) A mass of calcification with a well-demarcated border that is surrounded by altered collagen or fibrous tissue is considered true degenerative calcification, as previous investigators have concluded. (2) The second category comprises multiple irregularly sized and shaped calcium deposits, which are surrounded by an inflammatory cell reaction and capillary type of vascularization. This type of deposition which usually contains a small focus of degenerative calcification as a core of the massive calcification in the mitral anulus fibrosus, is more often encountered in valvular tissue.[3] The third category is a mixture of the first and second categories.

The results of this study support the conclusion that mitral anulus calcification is not merely an age-related degeneration, but that superimposed infectious factors contribute to its acceleration and extension. The complication of mitral anulus and valvular calcification and its implications in open heart surgery are discussed.

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The autopsy function must be reoriented to meet the needs of the day. The autopsy must do more than just *confirm the diagnosis* of the clinician, or even increase the *accuracy of vital statistics*, or establish the *exact cause of death* in natural or medicolegal cases or both. Autopsies alone no longer solve as many of the mysteries of disease. Yet the pathologist is in the ideal spot to correlate facts, and occasionally still to demarcate new entities. This old function of the autopsy needs rejuvenation. The pathologist is *cooperative*, not *competitive* with his colleagues, both clinicians and basic scientists; they should not belittle his efforts. The good autopsy is now more difficult than ever and demands a more versatile, inquiring mind and more training than heretofore.

Finally, our colleagues must give more than lip service to the autopsy. They must be autoptic and *participate* more actively. Getting the consent alone is not enough. Their presence at the procedure is stimulating. Staff should appear at the beginning if possible to detail the problems and at least at the conclusion of the autopsy. Surgical cases can be done better after complex operative procedures if the surgeon or the surgical resident is present. An assistant or qualified diener should be ever available to help the pathologist throughout the procedure.

The pathologist must fulfill his obligation too and demonstrate the pathology creatively with stimulating insight. To achieve this the pathologist must keep abreast of related advances in science and medicine; he must stress correlations and separate the known from the unknown, to be resolved by future studies. Consideration of the time demands on all requiries an efficient demonstration procedure—that is, an effective teaching program in pathology.

It is not the performance (performance is for the dance or the play), but the study, the serious, meticulous search and research, by qualified interested pathologists that counts. It is not the total number of autopsies or the percentage of total deaths, but the quality of each autopsy procedure that is important too—that is, the probing for maximum attainable information.

In summary, the autopsy must do more than confirm or correct the clinician's diagnosis, establish the cause of death for vital statistics or courts of law or evaluate therapy administered. It must be a source of stimulus to those who perform the procedure and care for the patient. Its potential can be realized only if its position in the medical scene is bolstered by grant and other support, plus necessary changes in its own inherent routine, so as to be stimulating to all and to promote further studies as extensions of the autopsy.

ALFRED A. ANGRIST

More on autopsies. *New England Journal of Medicine* 1965; 273:720. ■

Characteristic Ultrastructural Features of Some Tumors in Humans*

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During the past two decades, considerable information has been accumulated in the field of electron microscopy as it applies to tumors in humans and to ultrastructural pathology in general. Often, ultrastructural analysis can help distinguish one tumor from another quite accurately when light microscopic diagnosis is uncertain. In some tumors, as will be described, characteristic ultrastructural features enable pathologists to determine an unequivocal cell type. The purpose of this communication is to emphasize the usefulness of this important diagnostic tool in the field of tumor diagnosis.

A morphologic review of case reports

Case 1. An anterior mediastinal tumor from a 69-year-old woman was biopsied, and a diagnosis of metastatic melanoma was made on the basis of light microscopic findings. Ultrastructurally, the tumor cells showed melanosomes (Fig 1) of different forms and stages of melanization. Three basic forms were seen: melanosomes containing helical filaments (Fig 1B), striations with periodicity (Fig. 1C), and immature granules with homogeneous density devoid of structures (Fig. 1D).

Case 2. A nodule was excised from the groin of a 28-year-old female. There was a history of removal of an ankle lesion approximately two years previously from the same side of the body. Light microscopic slides of both excisions showed virtually identical spindle cells. Melanin pigments were not readily visible, and numerous differential diagnoses were entertained (Fig 2A). Electron microscopy revealed premelanosomes in the tumor cells (Fig 2B, C). Thus an unequivocal diagnosis of amelanotic melanoma—spindle cell type, probably metastatic from the ankle—was made.

Case 3. A tumor was removed from the cerebellum of an infant. Light microscopic diagnosis of neuroblastoma was confirmed, and a diagnosis such as desmoplastic medulloblastoma was ruled out by electron microscopy. Interesting light microscopic morphology is the cerebriform pattern of tumor growth (Fig 3A). Characteristic ultrastructural features included bundles of neuronal processes, synaptic vesicles, dense-core granules (Fig 3C, D), and most importantly, the presence of complete synapsis (Fig 3C).

Case 4. Multiple lesions were removed from the pancreas and the liver of a teenage female with severe hypoglycemia. Light microscopy revealed a glandular tumor with typical "ribbon" pattern (Fig 4A). Ultrastructurally, there were numerous membrane-bound electron-dense crystalline cores of varying size and shape (Fig 4B). Higher magnification showed characteristic crystalline angular cores that represent insulin (Fig 4B, inserts).

Case 5. A pleural fluid sediment obtained from a 71-year-old man was studied. Routine cytologic examination revealed malignant cells compatible with adenocarcinoma. Light microscopic examination showed aggregates of tumor cells (Fig 5A). Ultrastructure demonstrated numerous lamellar bodies (L), characteristic of alveolar cell carcinoma (pneumocyte type II origin) (Fig 5B). Higher magnification revealed well-preserved fingerprint-like structures with regular periodicity. The laminations are made up of unit membranes (Fig 5C).

Case 6. A renal pelvic tumor was examined by light microscopy, which revealed it to be a spindle cell tumor, most probably leiomyosarcoma (Fig 6A). Ultrastructure demonstrated characteristic focal densities as well as streams of myofilaments (Fig 6B). Insert shows higher magnification of the focal densities and attached myofilaments.

Case 7. Endometrial tissue obtained by curettage was examined by light microscopy, which revealed bizarre, hyperchromatic mononuclear cells and scattered strap cells without definitive cross striations (Fig. 7A). Ultrastructure of the strap cells clearly demonstrated striated muscle bundles arranged in primitive fashion (Fig 7B); Z band was also seen (Fig 7B, arrow).

Case 8. A tumor from a 36-year-old man, resulting from metastasis to the lung, was biopsied. The patient had had a growing nodule on the forearm for 18 years. Light microscopic examination of the elbow nodule as well as of the metastatic tumor posed

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* This investigation was supported in part by the Finkelstein Foundation, Grant 3-272. Part of the work was done at the Department of Pathology, Long Island Jewish-Hillside Medical Center.

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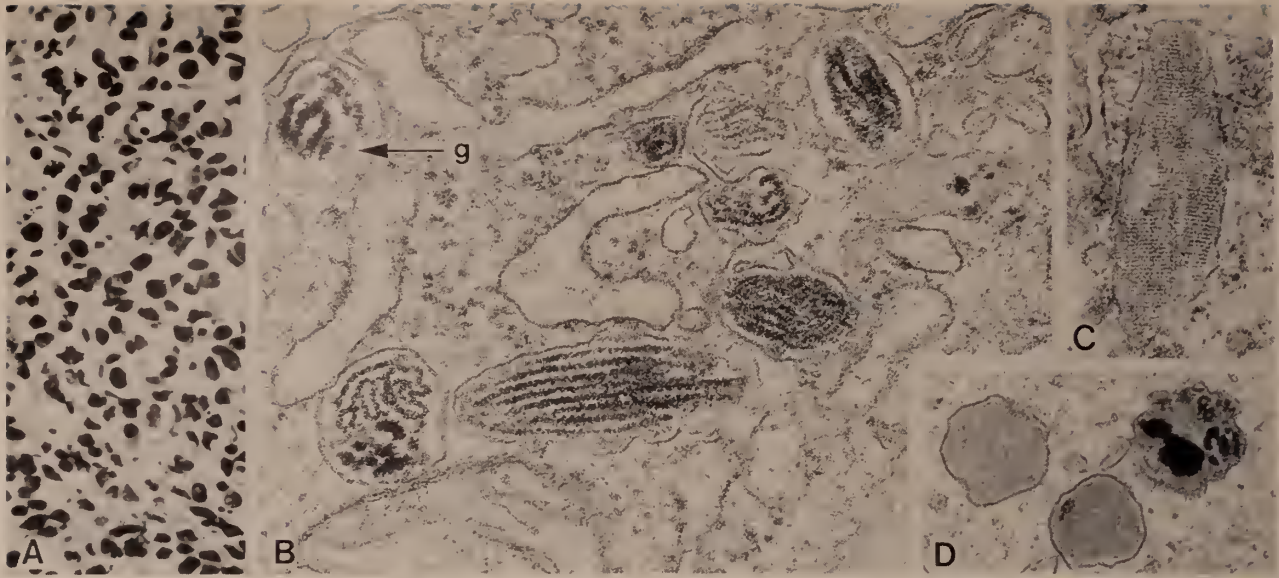

FIGURE 1. Case 1, pleomorphic melanoma. (A) Hyperchromatic and pleomorphic melanoma cells arranged in sheets; pigment is difficult to discern at this magnification (X 240). Electron micrographs showing melanosomes in three basic forms and stages of their development: (B) Helical melanofilaments and vesiculoglobular body (g) (X 56,000). (C) Striations with periodicity (X 65,000). (D) Stages in the development of melanosomes, with the most immature (granular) on the left (X 33,000).

a diagnostic problem (Fig 8A). However, a conclusive diagnosis of alveolar soft part sarcoma was made following ultrastructural findings of characteristic rhomboid crystalline structures (Fig 8B). Higher magnification showed well-delineated crystalline lattice with periodicity of approximately 85A°. There was a delimiting membrane, which could be ER. An interesting finding in these crystalline structures was the presence of regularly spaced, clear foci (Fig 8B, insert).

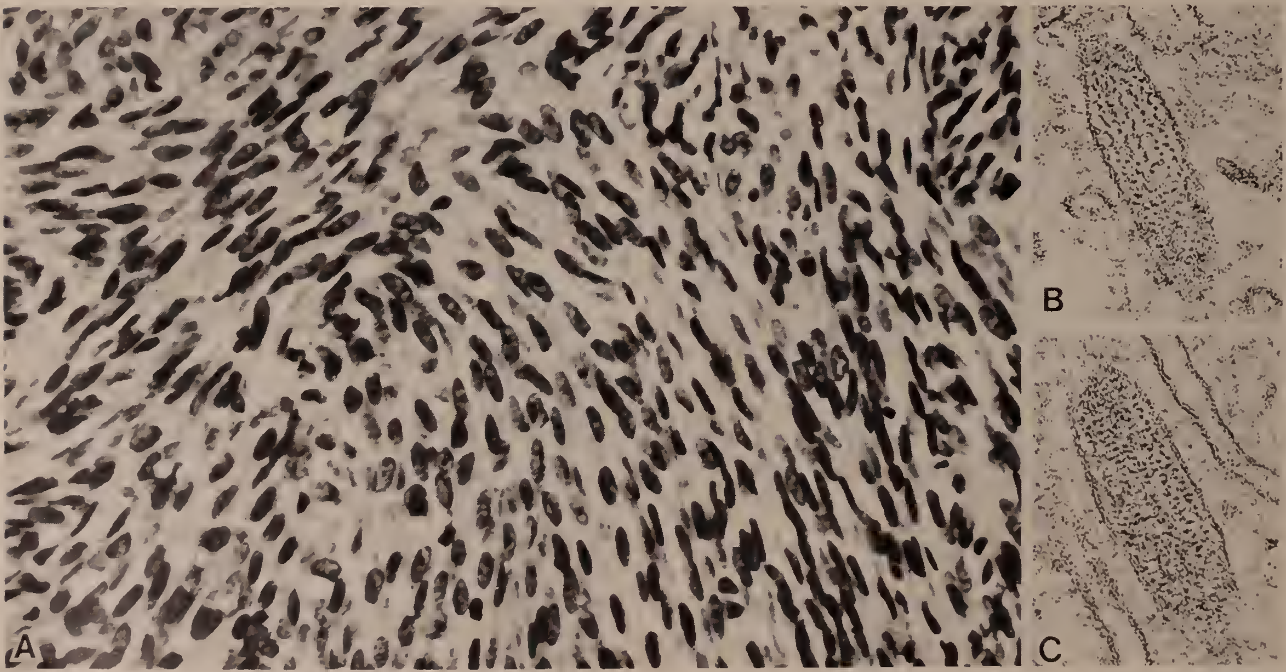

FIGURE 2. Case 2, amelanotic melanoma, spindle cell type. (A) Metastatic spindle cells arranged in bundles with distinct nucleoli, no pigment discernable (X 400). (B) Electron micrograph showing premelanosome (helical melanofilament type) (X 96,000). (C) Electron micrograph showing premelanosome (striated with periodicity type). These two (B and C) were the predominant types in this case (X 96,000).

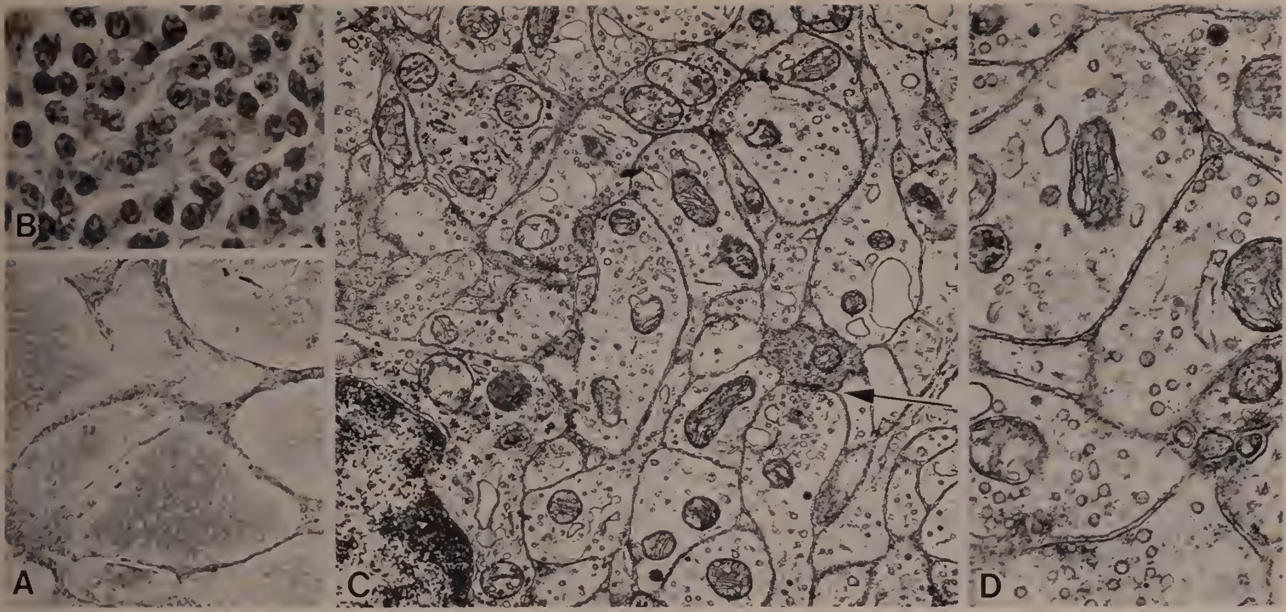

FIGURE 3. Case 3, neuroblastoma. (A) low magnification; cerebellar tumor showing a lobulated pattern separated by leptomeningeal infoldings (X 40). (B) Higher magnification shows rows of uniform and round tumor cells separated by acellular fibrous stroma (X 450). (C) Electron micrograph of a cell body and many processes of tumor cells; arrow indicates a complete synapse (X 13,000). (D) Higher magnification of cell processes showing numerous synaptic vesicles; a dense-core secretory granule is evident, upper right-hand corner (X 31,000).

Case 9. A peripheral nodule of the lung was removed from a 46-year-old white female. Light microscopic examination of the tumor showed clear cell tumor quite reminiscent of clear cell carcinoma of the kidney (Fig 9A). Ultrastructural study revealed abundant glycogen particles throughout the cytoplasm. In addition, there are numerous membrane-bound, dense, glycogen-laden granules (G), which are a unique feature of this tumor (Fig 9B). Insert shows an enlarged granule containing glycogen particles.

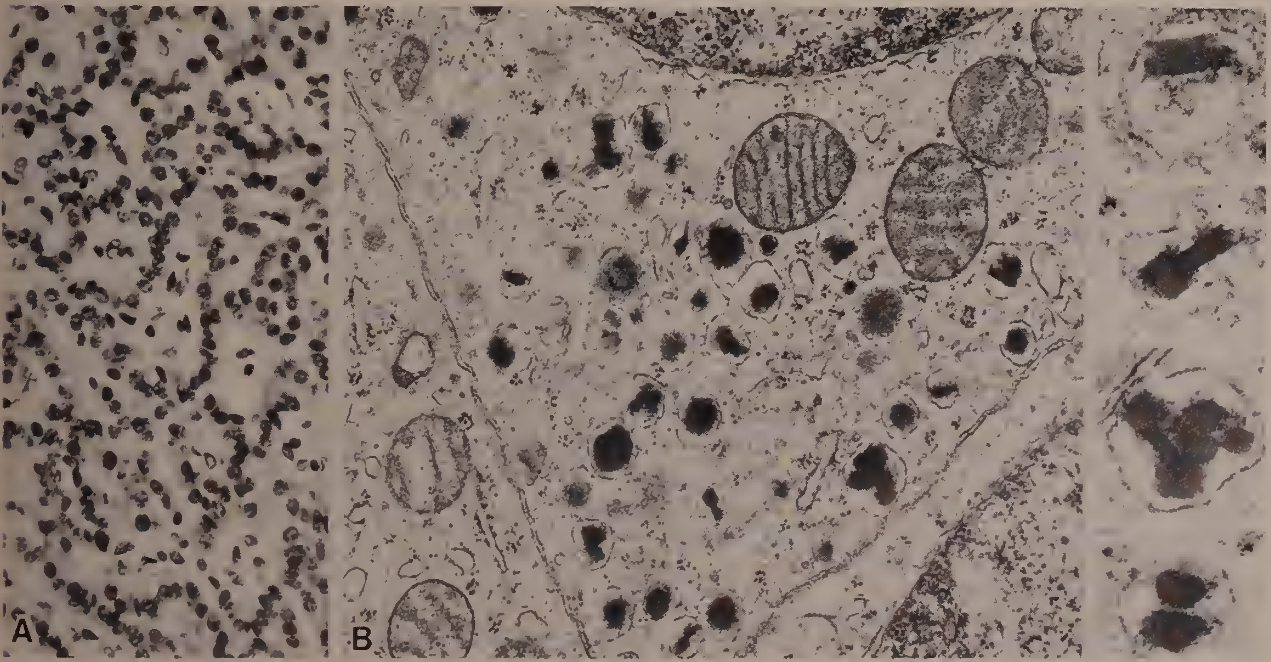

FIGURE 4. Case 4, insulinoma. (A) Glandular tumor cells showing ribbonlike pattern (X 250). (B) Electron micrograph showing numerous dense membrane-bound granules of different sizes and shapes; note characteristic angular crystalline contents (X 26,000). Inserts; higher electron micrographs showing variety of shapes (X 70,000).

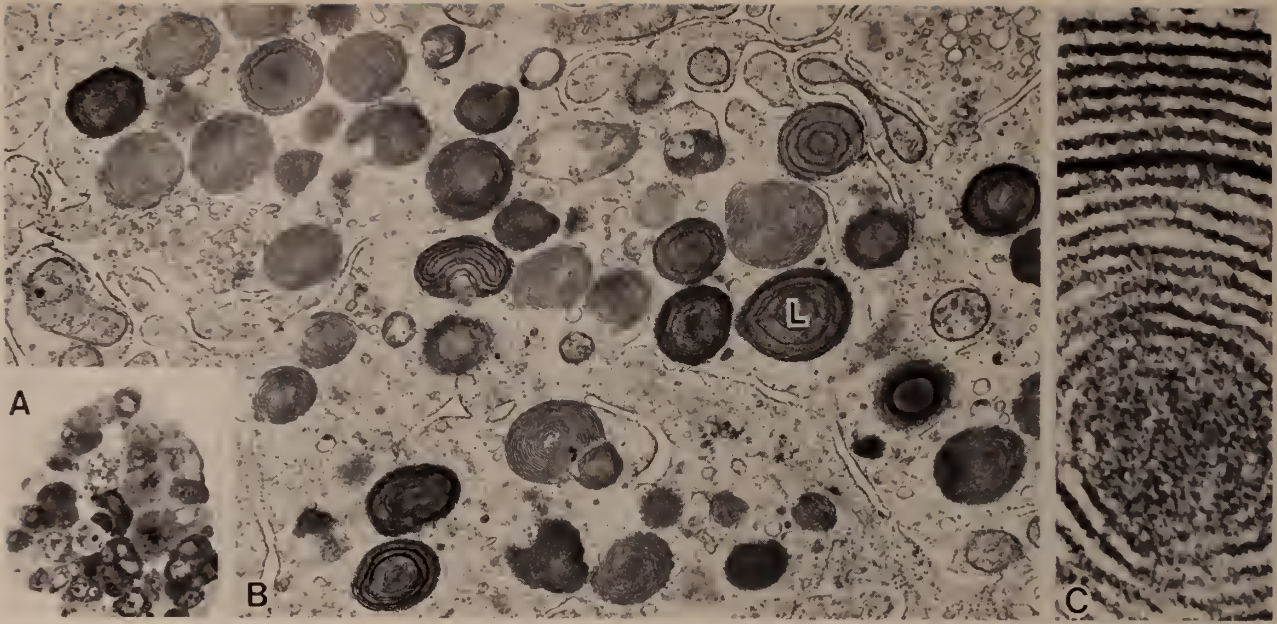

FIGURE 5. Case 5, alveolar cell carcinoma, pneumocyte type II. (A) Light micrograph of the pleural fluid sediment showing aggregate of tumor cells. Mitotic figures, pleomorphism, and prominent nucleoli are evident. Toluidine blue stain of Epon section (× 240). (B) Electron micrograph showing numerous multilaminated (surfactant) bodies (× 16,800). (C) Higher electron micrograph showing regular concentric lamination. Note unit nature of membranes (× 200,000).

Comment

Considerable literature is available concerning the ultrastructural study of tumors in humans. Diagnostically, ultrastructural study of tumors can aid light microscopic methods and, in some instances, it can play a vital role.[1–12]

More often, electron microscopic studies enable pathologists to distinguish tumors when light microscopy fails. For example, broad separation of classes of tumors can be made by electron microscopy among carcinomas, mesenchymal tumors, tumors of the hemopoietic system, APUDomas, neurogenic tumors, melanomas, and miscellaneous groups of tumors.[12–27]

Less often, electron microscopy of tumors can be specific diagnostically. Best known of the tumors that have ultrastructural hallmarks (in addition to the cases presented here) are tumors that contain melanocytes,[28–35] juxtaglomerular cell tumors,[36–37]

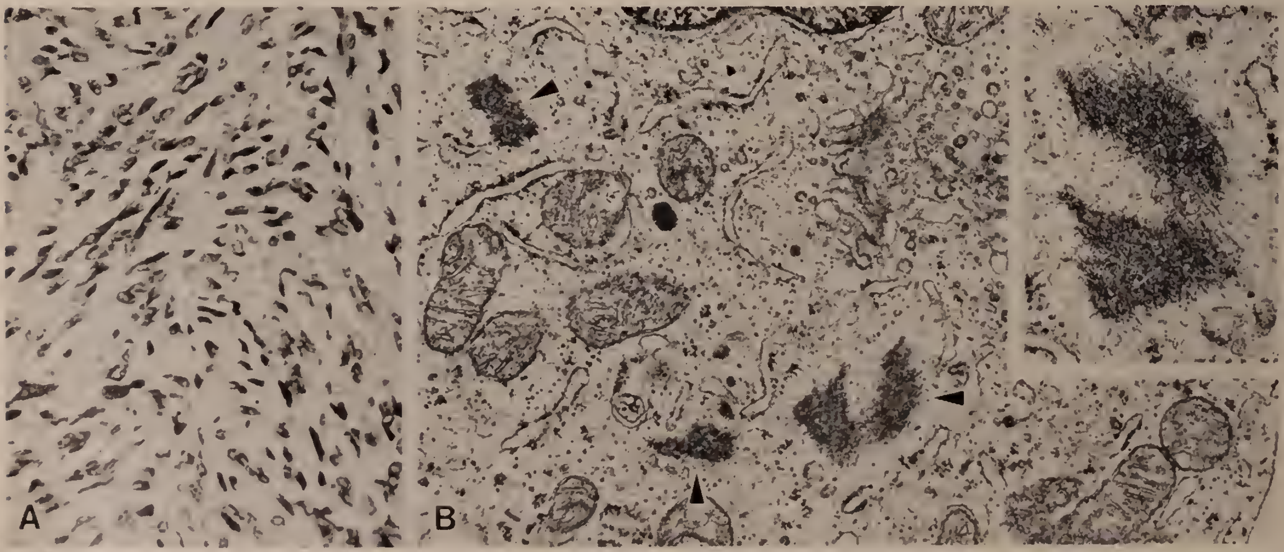

FIGURE 6. Case 6, leiomyosarcoma. (A) Light micrograph showing bundles of spindle cells (× 250). (B) Electron micrograph showing several characteristic focal densities (triangles), some with myofilamentous streams (× 20,300). Insert: higher electron micrograph showing a focal density (× 38,000).

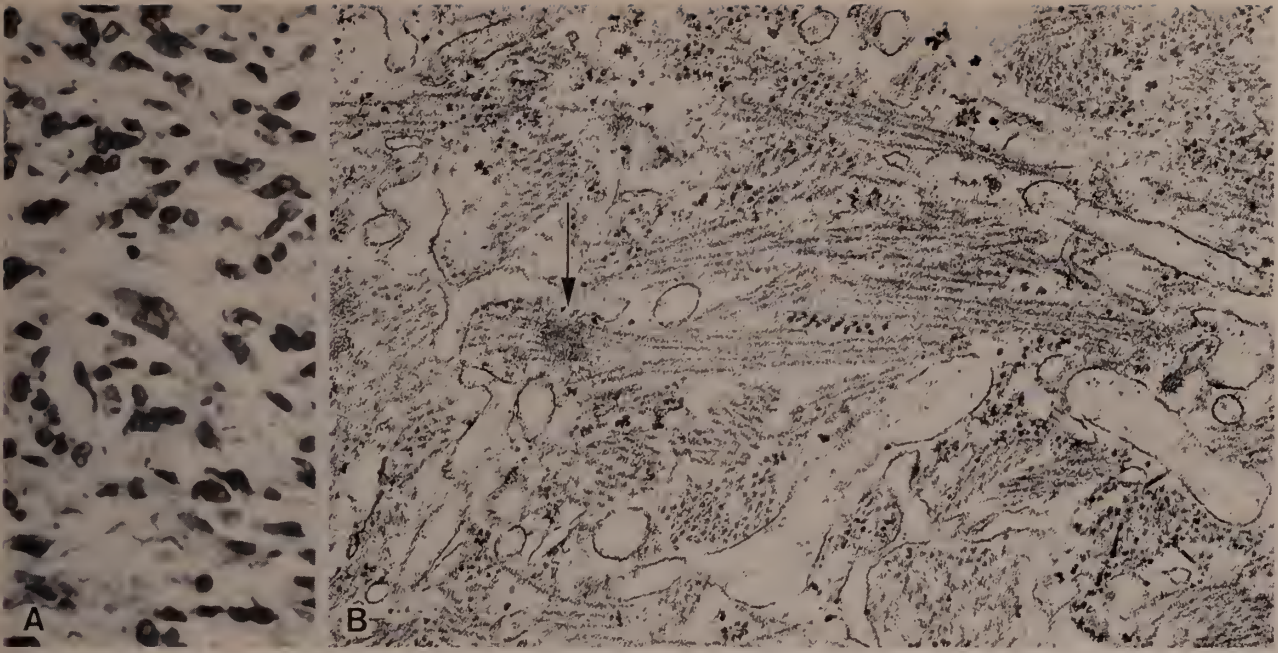

FIGURE 7. Case 7, mixed mesodermal tumor. (A) Light micrograph showing pleomorphic tumor cells. The large elongated cell in the center of the field is a strap cell (× 400). (B) Electron micrograph of the strap cell showing the primitive striated muscle arrangement of both thick and thin fibers, and the Z band (arrow) (× 40,000).

and hepatomas arising in α_1-antitrypsin deficiency.[38–40]

Ultrastructural features that are less specific can, nevertheless, provide clues in establishing diagnoses in the following selected tumors: angiofibromas of the nasal pharynx,[41–42] schwannomas,[43,44] granular cell tumors,[45–47] fibrosarcomas,[4,5,48,49] mesotheliomas,[50–51] meningiomas,[17] oncocytomas,[52,53] acinic cell carcinomas,[54,55] plasma cell tumors,[56–59] adrenocortical adenomas,[60–63] Langerhans cell lesions,[64–66]

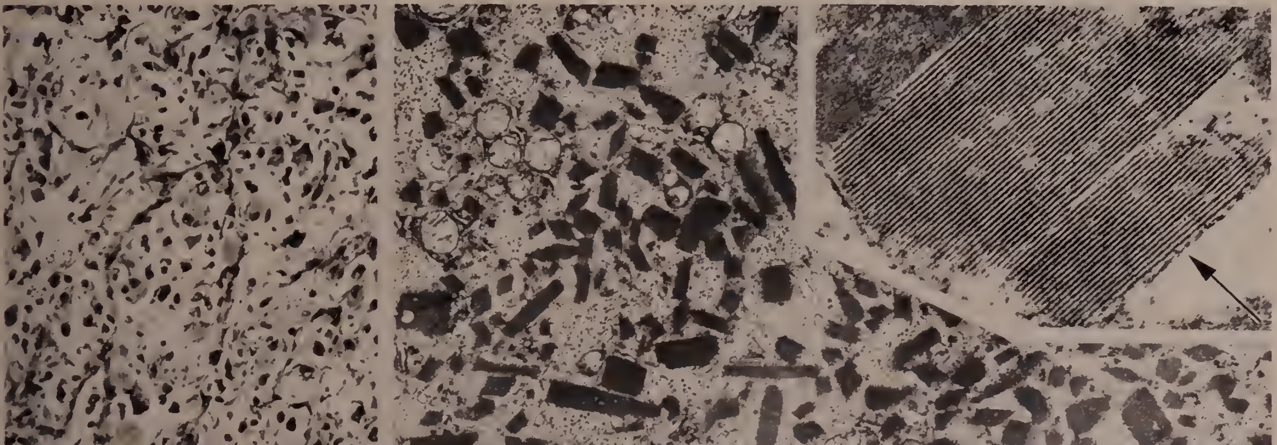

FIGURE 8. Case 8, alveolar soft part sarcoma. (A) Light micrograph showing plump cells with eccentrically located nuclei, clear cytoplasm, and organoid pattern (center) (× 160). (B) Electron micrograph showing numerous characteristic rhomboid crystalline cytoplasmic inclusions (× 5,000). Insert: higher magnification showing three such inclusion bodies with distinct periodicity, approximately (85A°). Note relatively uniform, randomly dispersed, clear foci within the crystalloid lattice and ER-like delimiting membrane (arrow) (× 82,000). (Courtesy of Drs. J. Waisman and K. Lewin)

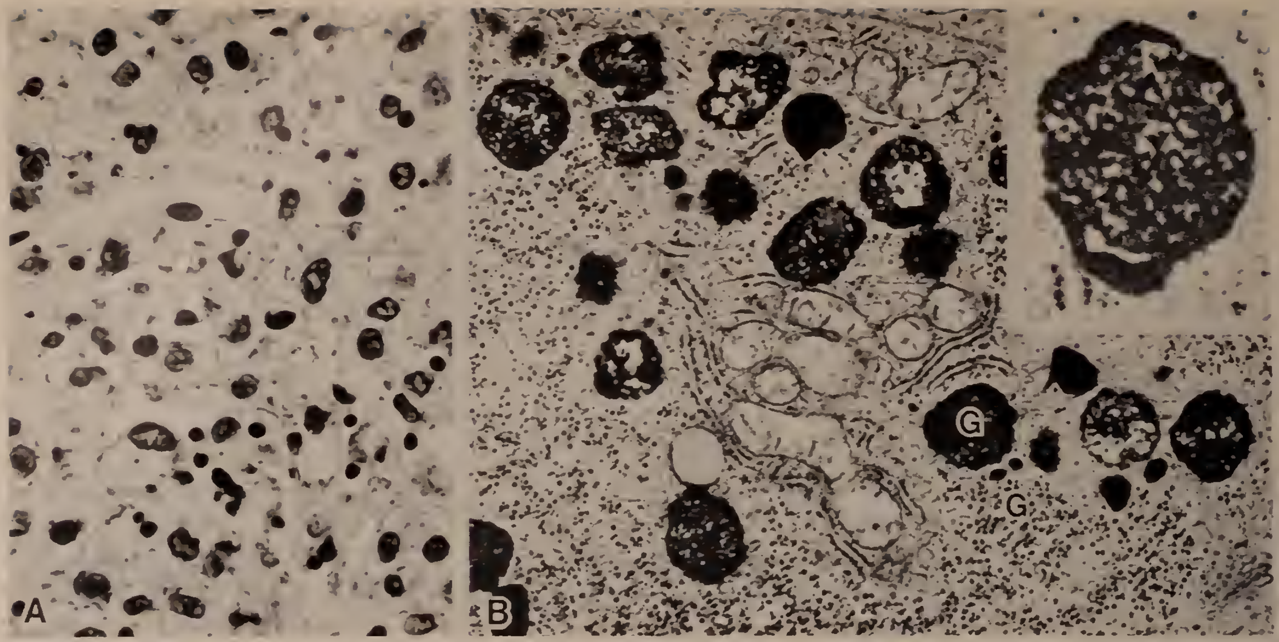

FIGURE 9. Case 9, benign clear cell tumor of the lung — "sugar tumor". (A) Light micrograph showing tumor cells with clear cytoplasm (X 400). (B) Electron micrograph showing dense spherical glycogen-laden structures (G) (outer membrane is not well delineated). Abundant glycogen particles present in background (G) (X 10,000). Insert: higher electron micrograph of a dense glycogen-laden structure for detail. (Courtesy of Drs. N. Becker and I. Soifer, 1971)

Sézary cell lesions,[67–68] and prostatic carcinoma.[69]

Of the nine cases presented here, the first five required electron microscopy to establish the diagnoses: amelanotic melanoma,[1,70,71] alveolar cell carcinoma (pneumocyte type II,)[8–11,72,73] neuroblastoma,[6] alveolar soft part sarcoma,[74–76] and benign clear cell tumor ("sugar tumor") of the lung.[7,77]

The other four cases—melanoma, insulinoma,[78,79] leiomyosarcoma,[80] and mixed mesodermal tumor[81]—are presented here for their ultrastructural hallmarks. Diagnostically, such findings confirmed the light microscopic diagnoses.

Cases 1 and 2. Melanomas presenting as amelanotic spindle cells[1] (Fig 2A) or round cells resembling lymphomas can often be troublesome in establishing a diagnosis. In these situations, electron microscopic study should help resolve the problem. Careful search for the presence of melanosomes is essential. Since there are different forms of melanosomes and various stages of development, it is important that one be able to recognize them. Not all tumers containing melanosomes are cutaneous melanomas, since various tumors, including clear cell sarcoma,[34,35] neuroectodermal tumor,[33] malignant skin tumor of neural crest origin,[28] melanoma of the cerebellum,[32] melanoma of the spinal cord,[31] pigmented neuroblastoma,[29] pigmented glioma, and ependymoma,[30] contain melanocytes.

Case 3. Many cerebellar medulloblastomas are poorly differentiated tumors so that their cell of origin is difficult to determine.[82–83] Electron microscopic study of one of these tumors proved it to be a well-differentiated neuroblastoma.[6,84] This unequivical diagnosis was based on the presence of numerous synaptic vesicles in the cell processes and the occasional complete synapses within the tumor tissue. Neuroblastomas occurring at other body sites have been reported.[85–88]

Case 4. Insulinomas produce characteristic secretory granules. They contain a uniquely dense crystalline structure of all forms, most notably rectangular in shape. The diagnosis of insulinoma is thus confirmed.

Case 5. The terms "bronchioloalveolar cell carcinoma"[11,89–91] and "alveolar cell carcinoma" [8,9] continue to exist due to the controversy concerning the histogenesis of these tumors. It seems clear that granular cell (pneumocyte type II) tumor is a distinct entity.[3] Ultrastructural study of cerebral spinal fluid,[8] metastatic lymph node,[11] and pleural fluid[10] reveals the characteristic lamellar bodies in large numbers. The exact relationship between this tumor and Clara cell carcinoma,[91–93] which also contains some lamellar bodies, is not clear and needs to be further investigated.

Case 6. Spindle cell tumors such as the case presented here (Fig 6) can often present diagnostic problems, and electron microscopy can be helpful in resolving the problem. Smooth muscle tumors contain "dense bodies" as well as myofibrils. The diagnosis of leiomyosarcoma is thus confirmed.

Case 7. Tumors of striated muscle origin and mesenchymal tumors containing myoblasts reveal characteristic mature and immature sarcomere arrangements (Fig 7B), depending upon the differentiation of the tumor. Diagnosis of mixed mesodermal tumor is thus confirmed.

Case 8. Alveolar soft part sarcomas can easily be confused with other tumors when only conventional diagnostic methods are utilized. Indeed, electron microscopy of the case presented here (Fig 8B) unequivocally establishes a diagnosis. Characteristically, some of the tumor cells contain large numbers of crystalline structures of rhomboid shape and smaller dense granules.[74–76] These inclusions exhibit a distinct crystalline lattice with periodicity of approximately 85 A°. In addition, the relatively uniform, randomly dispersed, clear foci within the crystalline structure (Fig 8B, insert) may also be an additional characteristic feature of this tumor.

Case 9. Benign clear cell tumor of the lung ("sugar tumor") so closely resembles clear cell carcinoma of the kidney that in some situations it may be extremely helpful to carry out electron microscopic study. Case reports by Becker et al[7] and Hoch et al[77] revealed the typical membrane-bound glycogen-laden bodies. As far as we are aware, there are no other clear cell tumors that contain these bodies.

In order to carry out meaningful ultrastructural analysis of tumors, one must make certain that tissue sampling and fixation are adequate. Desperate attempts to salvage tumor tissues from those that were routinely formalin fixed or from paraffin blocks for electron microscopy are far less meaningful and may even be misleading in some situations. Continued progress in this area of research into specific ultrastructural features should give pathologists greater confidence in establishing diagnoses of tumors in humans.

Acknowledgment. The author is grateful to James I. Berkman, M.D. for his support and to N. H. Becker, M.D., J. Waisman, M.D., and K. Lewin, M.D. for kindly supplying cases. The author also wishes to thank Mr. Nathan Kantor and Ms. Suni Kloss, and the Medical Media Department of the Sepulveda VA Medical Center, for technical and photographic assistance.

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Role of the Pulmonary Surfactant System in Lung Diseases of Adults

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The pulmonary surfactant system consists of the acellular material lining the lung alveoli and the cells that secrete this material, a scattered population of cuboidal cells situated in alveolar corners, termed type II epithelial cells. The ability of this material to lower surface tensions at the alveolar air-fluid interface—hence the designation "surfactant"—is due to its high content of saturated phospholipids, particularly saturated phosphatidylcholine (SPC). In the normally functioning lung, it appears that the alveolar surfactant or at least its saturated lipid components undergo active turnover, requiring constant replacement through secretory activity of the type II cells.[1] Failure of this replacement process could, in theory, seriously jeopardize pulmonary function.

Respiratory distress syndrome of the newborn is a disorder that illustrates the crucial role of the surfactant system. In the affected infant, inability of the immature type II cells to maintain adequate surfactant levels allows development of high alveolar surface tensions, leading to widespread alveolar collapse, the hallmark of the syndrome.[2] Much of the research on pulmonary surfactant has been concerned with defining the factors that influence the maturation of type II cells in the developing lung, since this information has clear importance for the prevention and treatment of infant respiratory distress syndrome.

The adult lung does not appear subject to widespread, isolated insufficiency of the surfactant system; at least, there are no reports of disease resembling the infant respiratory distress syndrome occurring in adults. The forms of diffuse alveolar injury resulting from trauma, shock, oxygen toxicity, and other causes, included under the general designation "adult respiratory distress syndrome" are associated with inflammatory damage, affecting primarily the alveolar capillary endothelium and the attenuated alveolar covering epithelial (type I) cells, rather than the type II cells.[3,4] It is quite likely, however, that varying degrees of type II cell dysfunction may occur in a variety of pulmonary syndromes in adults, as one component of a complex cellular response. Conceivably, the degree of preservation of type II cell function might critically affect the ability of the lung to maintain and restore alveolar architecture and capacity for gas exchange, particularly in the healing phase of injury. Information on the surfactant system in diseases of the mature lung is limited, largely because of the technical difficulties in measuring the quantity and turnover rate of surfactant in the living patient. The available evidence (derived largely from studies involving experimental animals) that bears upon the role of the surfactant system in certain diseases of the adult lung will be reviewed briefly.

Technical problems in measuring surfactant system activity

There are no means by which the volume and composition of alveolar lining material can be sampled over a meaningfully large portion of the lung. Direct alveolar micropuncture[5] is the only method for obtaining undiluted, uncontaminated alveolar lining fluid. This technique, which is applicable only to experimental animals, permits sampling of a small number of subpleural alveoli and yields minute sample volumes, which must be analyzed by ultramicroanalytical techniques. Lavage of the lung via the airways is a much more widely used method for recovering relatively large quantities of alveolar lining material, although it has the disadvantages of diluting the material and contaminating it with airway secretions and blood components.[5] The simplest method of estimating the total quantity of alveolar lining material in animals is exhaustive lavage of the lung and quantitation of SPC,[6] or "surfactant" concentrates, prepared by centrifugal fractionation,[7] in the combined lavage return. Bronchoscopic lavage of the lung in living human subjects also allows recovery of alveolar lining material for analysis.[8] However, it is usually not possible to estimate the amount of parenchyma that has been lavaged or the efficiency of recovery. Since SPC occurs as a membrane component in cells of the alveolus,[9] validity of lavage SPC as an estimate of surfactant secretions in damaged human lungs is also a problem. Certain proteins have been found specifically associated with alveolar lining material and appear to be made in the type II cell[10]; although they do not have surfactant properties,[11] they may prove to be a more valuable

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marker than SPC for study of type II cell secretions in the injured lung. Opportunities to study human lung lavage fluid will undoubtedly increase as the application of bronchoalveolar lavage in clinical diagnosis of lung disease continues to grow.[12]

Assessment of the other component of the surfactant system, the type II epithelial cell population, has generally been done by morphologic methods. Definitive identification of type II cells and of their secretory organelles (lamellar bodies) requires electron microscopic examination, and because type II cells are dispersed singly throughout the extensive alveolar surface area, study of large numbers of sections is usually required for adequate sampling of the population. Application of morphometric methods to electron micrographs of the lung has been a rewarding method of studying type II cell response to injury in experimental animals.[13] Assessment of type II cells in transbronchial biopsies in humans is limited by sampling problems. The morphologic evaluation of type II cells is also subject to two considerations: First, the size of type II cell secretory vacuoles does not correlate with the amount of alveolar secretions in at least some conditions.[14] Second, type II cells serve a dual function in the alveolus, acting as reserve cells as well as secretory cells. Reepithelialization of denuded alveolar surfaces occurs by proliferation of type II cells, followed by transformation of these cells to broad, attenuated covering epithelium (type I cells).[15] Therefore, an increased number of type II cells in an injured region of the lung might reflect regenerative as well as secretory activity and cannot be assumed to directly correlate with surfactant production.

Methods of isolating purified populations of type II cells for in vitro study[16,17] have been developed recently and have made it possible to measure type II biosynthetic[18,19] and secretory[20] functions by chemical as well as morphologic techniques. Type II cells have been obtained from acutely injured as well as normal lungs and demonstrate changes in lipid metabolism correlating with injury.[21] No studies have been reported as yet that have used type II cell populations isolated from adult human lungs. Disadvantages of in vitro studies of type II cells are the relatively small yields obtained by the isolation techniques (a minor fraction of the calculated total type II cell population of the lung), internal as well as membrane damage to the cells produced by the isolation procedures,[22] and rapid loss of metabolic specialization in the cells after they are seeded in culture.[23] Cultures of cloned fetal lung cells[24] and established cell line derived from lung tumors[25,26] have been proposed as convenient type II cell "models," since they provide large numbers of cells for study. They appear, in fact, to have considerable morphologic, chemical, and metabolic differences from the type II cell.[27]

Because there is no definitive method of quantitating the activity of the lung surfactant system, it seems clear that conclusions about surfactant system changes in any particular form of lung injury—and their causal relationship to changes in pulmonary function—must be established through more than one type of measurement. Studies using the intact organism, the excised lung, lavage fluid, and isolated lung cells, have their own particular advantages and limitations. The limitations can be best overcome by independent experiments using a combination of experimental approaches. It is therefore clear that animal experiments, permitting reproducible models of lung injury, will be a major means of gaining knowledge of the involvement of the surfactant system in lung injury.

Pulmonary thromboembolism

Surfactant system activity almost certainly decreases in hypoperfused regions of the lung following embolic occlusion of major pulmonary artery branches. A straightforward animal model of this condition, unilateral pulmonary artery ligation in the dog, is one of the best studied experimental methods of modulating the surfactant system. Ligation of a stem pulmonary artery results in decreased lung volume, airway conductance, and surface activity of alveolar lavage on the affected side.[28,29] Type II cells in the hypoperfused lung become depleted of secretory organelles,[30] and biochemical changes in lung tissue and lavage fluid are consistent with decreased production of surfactant.[31] The cellular mechanism is not entirely clear but likely involves loss of the supply of exogenous substrates to the type II cells. Extracellular levels of glucose and fatty acids are important in maintaining synthesis of surfactant lipids in isolated type II cells.[18,19,32]

In clinical pulmonary embolism, it appears likely that areas of atelectasis in the embolized lung, caused by focal surfactant depletion, account for some of the abnormal radiographic and physical signs of occlusion of major pulmonary artery branches.[33] Surfactant changes are presumably less important in small branch occlusions, where the characteristic parenchymal response is dominated by alveolar hemorrhage or infarction.[34] It is conceivable, however, that surfactant depletion might exacerbate alveolar hemorrhages or cause local edema by increasing transalveolar capillary pressure gradients.[35] The collapse of airspaces may in itself be a desirable and compensatory response to arterial occlusion, since it has the effect of minimizing ventilation of alveolar dead space.[33]

Diffuse alveolar injury

Studies on human lungs have demonstrated that the early phase of the adult respiratory distress syndrome associated with trauma and shock (shock lung) is characterized by abnormal surface properties of alveolar lavage fluid.[36] The protein content of the lavage is increased relative to lipid,[36] suggesting that the altered properties could be due in part to physical interactions between surfactant lipids and proteins released from the injured alveolus[37] and not necessarily to altered type II cell function. Other compounds that might be released from injured tissue, such as cholesterol,[38] also can interfere with surface activity. Studies on human lungs with diffuse alveolar injury are limited by the difficulty of obtaining samples that do not show superimposed effects of infection and intensive respiratory therapy.

Animal models of diffuse alveolar injury produced by septic shock,[39] inhaled gases,[40–42] dusts,[43,44] irradiation,[45] and systemic toxins[46–50] have been used to investigate the response of the surfactant system to alveolar damage. Evidence has been obtained indicating either increased[41,43,44,47,49] or decreased[39,46,48,50] activity of the surfactant system following injury in different experiments. Depending on the exposure conditions and time intervals studied, and the same injurious agents, including hyperoxia[40,42] and irradiation,[45] have been demonstrated to both stimulate and inhibit surfactant production. Although these studies have employed differing technical approaches to assess function of the surfactant system, it seems likely that the different observations are, in fact, reflective of true biologic variations in response to injuries of differing severity. In general, severe alveolar injuries with extensive necrosis of the lining epithelium, affecting type II as well as type I cells, result in decreased production of surfactant. Such a pattern of damage is typical of lethal, acute alveolar injury; however, extensive epithelial destruction can be compatible with survival if there is relative sparing of alveolar capillary endothelium.[48,50] Increased synthesis and secretion of surfactant has, in general, been observed following milder degrees of alveolar injury and during the later recovery phase of nonlethal, severe alveolar injury. This increased activity appears to involve both stimulation of individual type II cells (a response which can occur rapidly[21,47] and increased numbers of type II cells per unit of lung mass (occurring over several days).[13] Proliferation of type II cells serves in alveolar repair[15] as well as surfactant production, as previously mentioned.

There are several reasons to believe that increased production of surfactant is a desirable compensatory response to alveolar injury besides the fact that it occurs characteristically during the recovery phase of severe alveolar injury. First, surfactant turnover via physiologic routes is increased during hyperventilation.[51,52] Increased ventilation triggered by lung injury would thus lead to a need for increased surfactant production to maintain adequate concentrations of alveolar surfactant lipids and normally low alveolar surface tensions. Second, increased secretion of surfactant might also aid in restoring normal surface properties after deactivation of lining material by products released from damaged alveolar tissue.[37,38] Maintenance of the normally low alveolar surface forces would tend to minimize transudation of fluid from alveolar capillaries,[35] prevent collapse of alveolar walls, and facilitate reexpansion of alveoli that have temporarily collapsed.[53] There is evidence that surfactant depletion in damaged alveoli can result in permanent alveolar collapse, distortion of lung architecture, and decreased lung compliance after healing.[50] A third argument for regarding surfactant production as beneficial during injury involves a different role of the alveolar secretions, that of clearing fluid and particulates from the alveolar lumen.[54,55] Surfactant produced in increased amounts might play an important part in removing both exogenous agents and endogenous breakdown products, either of which might be harmful, from the alveolus. Fourth, surfactant material tends to adsorb to dust particles, thereby limiting their cytotoxic effects.[56] Finally, surfactant promotes motility[57] and bactericidal capabilities[58,59] of alveolar macrophages. These theoretic considerations all suggest that increased activity of the surfactant system would tend to minimize local damage resulting from harmful agents in the alveolus, to maintain more normal respiratory function during acute and recovery phases of alveolar injury, and to minimize loss of lung architecture after healing. The contrary view, that increased surfactant production is itself harmful to the lung, has considerably less evidence in its support; this will be discussed in the following section.

Alveolar proteinosis and endogenous lipoid pneumonia

Alveolar proteinosis and endogenous lipoid pneumonia are examples of lung parenchymal disease that may be aptly classified as alveolar filling disorders. In alveolar proteinosis, the airspaces become filled with amorphous lipidic and proteinaceous acellular material; in endogenous lipoid pneumonia, with lipid-engorged macrophages. In both conditions, analysis of the increased tissue lipid suggests that it contains appreciable quantities of surfactant-associated species.[60,61]

In its commonest setting, endogenous lipoid pneumonia develops as a consequence of an intrabronchial lesion, usually a carcinoma, that interferes locally with the mucociliary clearance mechanism. This mechanism may participate in the removal of the surfactant from alveoli as part of the normal turnover process, both by bulk transport of secreted lipids along with mucous secretions[62] and by carrying away macrophages that have phagocytosed the surfactant lipids.[63] Macrophages that accumulate in lung parenchyma distal to the obstructed bronchus become engorged with lipid. Cholesterol, a minor lipid component of secreted surfactant, is present in appreciable quantities in these cells. This may result from the inability of macrophages to degrade cholesterol,[64] although they can degrade phospholipids.[65] The engorged macrophages do not appear to become functionally disabled.[66] There is no evidence that the surfactant system participates in the disease, other than that the passive accumulation of secreted material serves as a marker of the depressed clearance function.

Alveolar proteinosis generally occurs without apparent precipitating cause, although frequently in the setting of an immune deficiency, lymphoreticular malignancy, or chronic dust/fume exposure. The form of the disease that occurs in adults usually involves the lungs diffusely, follows an indolent course, and can be successfully managed by bronchoalveolar lavage. In animal models of the disorder, the appearance of proteinaceous debris in alveoli is preceded by a cellular alveolar filling process resembling lipoid pneumonia.[61]

The presence of appreciable quantities of surfactant-associated lipids in alveolar proteinosis debris has led to the speculation that the disease may be caused by the overproduction of surfactant.[67] Evidence against this hypothesis is provided by failure to document increased SPC synthesis in patients with proteinosis[68] and by a lack of chemical, physical, and morphologic similarity between proteinosis material and surfactant.[61] Ultrastructural evidence suggests that secreted surfactant material may be passively trapped in the debris, accounting for its relatively high concentrations of surfactant-associated lipids. The debris itself probably derives primarily from breakdown of injured alveolar macrophages.[61] In some forms of experimental alveolar proteinosis induced by amphiphilic drugs, the drug molecules may enter the alveolar macrophage and cause injury after first complexing with surfactant phospholipids.[69] In any case, the alveolar macrophage, and not the type II cell, appears to be the primary responder to injury in both lipoid pneumonia and alveolar proteinosis.

Pulmonary emphysema

A limited amount of information suggests that surfactant alterations may be involved in the production of lesions of pulmonary emphysema. Although not all authorities agree on the nature of the earliest lesion of emphysema, some have argued that the disease is first manifested by an increase in the number and size of alveolar fenestrations.[70,71] Alveolar fenestrations of the normal lung (Kohn's pores) are known to be filled with alveolar lining material in vivo.[72] The earliest changes reported to occur after instillation of papain into the lung (a well-studied method of producing emphysema in animals),[73] include removal of surfactant from the interalveolar pores, together with an associated increase in the area of the pores.[74] Papain instillation also causes other morphologic changes in the alveolar lining layer and affects alveolar stability,[75] although it is less clear how these processes might contribute to development of emphysema. Although the relationship between surfactant and emphysema will become clearer as knowledge of the early lesion of emphysema increases, it seems unlikely that surfactant plays a major role in the disease.

Lung carcinoma

A relatively small percentage of human lung carcinomas have been found to have morphologic features suggesting origin from type II alveolar cells. In a recent study,[76] tumor cells of 13% of 23 cases of bronchiolar-alveolar cell carcinoma (a group comprising 1 to 3% of all lung carcinomas[77]) were found to have cytoplasmic lamellar bodies and to react with an immunospecific stain for surfactant apoprotein. In mice, urethane injection can induce lung tumors comprised of cells resembling type II cells.[78] Both human and animal tumors of type-II-like cells have provided established lines of tissue culture cells that have been used to study cellular synthesis of saturated lipids[25,26]; however, these cells do not show great similarity metabolically to isolated type II cells.[27] Type II cell carcinomas are unlikely to gain clinical importance as a subgroup of human lung cancer, since they occur infrequently and their recognition requires study at the ultrastructural level, a method that is not often used in routine tumor classification.

Factors modulating surfactant system activity

The surfactant system appears to be well stabilized throughout adult life. Production of type II cell secretions is adjusted to maintain constant, low alveolar surface tensions, both in the face of hyperventilation, with increased turnover of lining material,[51,52] and when the lung is passively collapsed.[79] There is no evidence that activity of the system is decreased with advancing age.[80] It is possible, however, that the capacity of the surfactant system to meet demands could be compromised in situations encountered in clinical medicine. Animal studies indicate that type II cells may be specifically injured by chronic exposure to cigarette smoke, with measurable effects on their ability to produce surfactant.[7] Lung SPC synthesis in vitro is diminished at acid pH, suggesting that systemic acidosis may impair surfactant production.[81] There is evidence that starvation[6] and dietary deficiency of essential fatty acids[82] depress surfactant production, although pulmonary manifestations are not major components of these nutritional syndromes. Mechanical ventilation of the lungs appears to increase turnover of surfactant, an effect that can be minimized by use of positive end-expiratory pressures.[83,84]

A variety of other factors have been shown to affect either the morphology of type II cells, lipid composition of the lung tissue, or lavage lipid composition, suggesting they may influence the rate of synthesis or secretion of surfactant by type II cells or turnover of surfactant in the alveolus. Alcohol ingestion[85] and experimentally induced diabetes[86,87] have complex effects upon surfactant-associated and other lipids of the lung. Some forms of dietary hyperlipidemia appear to increase the size of type II cell secretory organelles[88] and to increase levels of some surfactant lipids in the alveolus.[89] There is evidence that corticosteroids may promote surfactant lipid synthesis in type II cells of the adult lung[90] and may affect the response of type II cells following alveolar injury.[91] Other drugs may also modulate synthesis and secretion of surfactant in type II cells,[92,93] although information on this point is limited. In general, all of these possible modulating factors need further study in a variety of experimental systems to document precisely which steps in surfactant metabolism are affected.

A convincing argument can be made for therapeutic efforts to stimulate surfactant production in some clinical situations, particularly in cases of diffuse lung injury. Further knowledge of the effect of pharmacologic agents on the type II cell and alveolar lining material may make such intervention feasible. At present, available measures to ensure adequate surfactant function in adult patients are limited to nutritional support and general respiratory care.

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Placenta Accreta

A 26-year clinicopathologic review (1956–1981)

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The term "placenta accreta" covers all conditions in which the placental villi adhere to, invade into, or penetrate through the myometrium.[1] Most reviews of placenta accreta have focused on the various clinical associations and possible etiologic factors. The principal histopathologic feature, a deficiency of decidua basalis,[2] has been used to confirm the diagnosis in past studies, done principally on hysterectomy specimens.[3–10] Fox[1] and Read et al,[8] however, have reiterated the importance of including clinically diagnosed cases. We wish, therefore, to reassess the histopathologic criteria of placenta accreta and the feasibility of confirming the clinical diagnosis by placental histopathology.[2] We will also reassess the clinical antecedents of placenta accreta in the context of current obstetric and gynecologic practice.

Material and method

Thirty-five cases of placenta accreta, in the files of William Beaumont Hospital, Royal Oak, Michigan, during the period 1956 to 1981, were identified on clinical grounds as nonseparation of the placenta. There were 100,075 deliveries during the same period. Seven cases were excluded because of inadequate pathologic material. Of 28 cases (Table I), 23 were confirmed by histopathologic examination of hysterectomy specimens. Four of the remaining five cases were verified by placental pathology. One of those four required curettage 11 days after manual removal of the placenta, and the curetted specimen also showed changes of placenta accreta. The diagnosis in the last case was substantiated by the pathologic examination of placental tissue curetted two weeks post partum.

Histologic sections stained with hematoxylin and eosin were available in all 28 cases. The sections contained adequate samples of uteroplacental junction. Trichrome-stained sections were frequently available. Microscopic slides were reviewed by all three authors. Gross photographs of the uterus, frequently showing the extent of placental invasion into myometrium, were also available for evaluation in 15 cases.

In order to clarify the histopathologic features of placenta accreta, especially in the five placentas removed manually or by curettage, sections of 50 consecutive placentas without clinical history of placenta accreta or postpartum hemorrhage were evaluated. The maternal surfaces of these placentas had portions of attached decidua basalis and were used as controls to assess the decidual deficiency of the abnormal cases. Seven of the control placentas were obtained from primary cesarean section.

Clinical findings

Maternal factors (Table II). The mean age was 31.7 years (range 25 to 42 years). Only three of the 28 women (11%) had been nulliparous; two of them were primigravidae. Seven of the 28 women (25%) had five or more children.

Uterine and placental factors (Table III). Eighteen patients (64%) had a history of uterine curettage and 13 (46%) of cesarean section; only three patients (11%) had neither. Of the 18 women with a history of curettage, 10 (36%) had undergone the procedure more than once. Of the 13 women with a history of cesarean section, six (21%) had had more than one. Ten patients (36%) had a history of placenta previa. One patient, without any history of uterine curettage or cesarean section, had a congenital uterine abnormality (uterus didelphys). No associated factor was noted in two cases.

Clinical presentation and treatment (Tables I, IV). Some form of hemorrhage occurred in all 28 patients. Failure of the placenta to separate preceded manual removal and hemorrhage in 18 cases. The uterus ruptured in three patients; in two of these there was also subsequent hemorrhage. The third patient, one with no history of surgical manipulation, had placenta percreta. Five patients presented with delayed postpartum bleeding and two with postabortal hemorrhage.

Five patients had some form of placenta previa.

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One patient had placental abruption and one had a twin pregnancy. One patient without previous term pregnancy had persistent uterine bleeding following spontaneous abortion; the diagnosis of placenta accreta was made on histopathologic examination of a placental polyp.

Twenty-three of the 28 women required hysterectomy to control hemorrhage, which was precipitated in most of them by attempts at manual removal of the placenta. Five were treated conservatively with curettage or manual packing, oxytocic agents, and blood volume replacement. No maternal or third trimester fetal deaths occurred.

TABLE I. Placenta Accreta (28 Cases) William Beaumont Hospital 1956–1981

	Age	Gravidity	Parity	Past History	Delivery	Clinical Presentation	Management
1	38	3	1	D&C	Vag	Failure to separate, hemorrhage	Manual removal, packing, hysterectomy
2	32	3	2	C/S, placenta previa	C/S	Failure to separate, placenta, previa, hemorrhage	Manual removal, packing
3	35	8	5	D&C, placenta previa	Abortion	Postabortal hemorrhage	D&C, hysterectomy
4	31	6	4	D&C, retained placenta	Vag	Failure to separate, hemorrhage	Manual removal, D&C, packing
5	34	6	4	D&C, C/S	Vag	Failure to separate, hemorrhage	Hysterectomy
6	42	4	2	D&C	Vag	Failure to separate, hemorrhage	Manual removal, D&C, packing, hysterectomy
7	31	6	4	D&C	Vag	4 weeks PP hemorrhage	D&C, hysterectomy
8	31	3	2	C/S, partial placenta previa	C/S	Ruptured uterus, hemorrhage	C/hysterectomy
9	31	4	1	D&C, C/S, placenta previa	C/S	Ruptured uterus, placenta previa, hemorrhage	C/hysterectomy
10	30	12	9	D&C, C/S, placenta previa	C/S	Placenta previa, hemorrrhage	C/hysterectomy
11	25	2	1	C/S	C/S	Failure to separate, hemorrhage	C/hysterectomy
12	25	1	0	. . .	Vag	13 days PP hemorrhage	Hysterectomy
13	26	3	2	C/S, IUD	C/S	Failure to separate, 18 hours PP hemorrhage	Hysterectomy
14	28	2	1	C/S	C/S	Failure to separate, hemorrhage	C/hysterectomy
15	33	5	3	D&C, septic abortion, cold cone	Abortion	Incomplete abortion, hemorrhage	Hysterectomy
16	38	3	1	D&C, C/S	C/S	Failure to separate, hemorrhage	C/hysterectomy
17	37	5	4	Uterus didelphys	Vag	Failure to separate, 2 hours PP hemorrhage	Manual removal, hysterectomy at 2 hours
18	28	4	2	D&C, C/S	C/S	Abruption, placenta previa, hemorrhage	C/hysterectomy
19	33	5	2	D&C, C/S	C/S	Failure to separate, hemorrhage	C/hysterectomy
20	34	6	4	D&C, C/S placenta previa	C/S	Placenta previa, hemorrhage	C/hysterectomy
21	31	7	3	D&C, postabortal hemorrhage	Vag	Failure to separate, hemorrhage	D&C, hysterectomy
22	30	5	4	C/S, placenta previa	C/S	Penetration to bladder, failure to separate, hemorrhage	C/hysterectomy
23	32	3	2	D&C	Vag	Failure to separate, hemorrhage	Hysterectomy
24	27	4	3	Postpartum endometritis	Vag	Failure to separate, uterine atony, hemorrhage	Manual removal, D&C, hysterectomy
25	34	4	2	D&C	Vag	1) Twins, failure to separate, hemorrhage 2) 11 days PP hemorrhage	Manual removal D&C
26	30	1	0	. . .	C/S	Failure to separate, hemorrhage	Manual removal
27	33	2	1	D&C, C/S	Vag	Failure to separate, hemorrhage	Manual removal, D&C
28	29	6	0	D&C	Abortion	Postabortal persistent uterine bleeding 6 weeks, placental polyp	Hysterectomy

Vag = vaginal delivery
C/S = ceserean section
PP = postpartum
D&C = dilatation and curettage
IUD = intrauterine contraceptive device

TABLE II. Maternal Factors

	William Beaumont Hospital (1956–1981)	Read (1975–1979)	Breen (NA)
Total cases	28	22	40
Mean age (range)	31.7 (25–42)	29.5 (17–45)	29.5 (17–41)
Mean gravidity (range)	4.4 (1–12)	3.4 (1–9)	...
Mean parity (range)	2.5 (0–9)	2.0 (0–6)	...
5 or more children (%)	7 (28)	...	...
Mullipara (%)	3 (11)	...	...
Mean abortion	1.0	1.0	...

NA = not available

TABLE III. Uterine and Placental Factors

	William Beaumont Hospital (1956–1981)	Fox (1945–1969)	Read (1975–1979)
Total cases	28 (%)	622 (%)	22 (%)
Previous D&C	18 (64)	188 (30)	6 (27)
1 D&C	10 (36)	...	...
Previous C/S	13 (46)	154 (25)	6 (43)
1 previous C/S	6 (21)	...	...
C/S and/or D&C	24 (86)	342 (55)	12 (86)
No previous intrauterine trauma	3 (11)	...	...
Placenta previa	5 (18)	...	...
History placenta previa	10 (36)	...	...
Prior postpartum hemorrhage	4 (14)	...	...
Uterus didelphys	1 (4)	...	...
No associated factors	2 (7)	...	...

D&C = dilatation and curettage
C/S = cesarean section

Pathologic findings

The specimens were divided into two groups: hysterectomies and placentas only.

Hysterectomy specimens. There were 23 uteri. In 17, the adherent placental tissue was demonstrated macroscopically (Fig 1). In three, the presence of adherent placenta was suspected grossly. The remaining three uteri did not contain grossly identifiable placental tissue; one of the three, however, had had fragments of grossly evident placental tissue curetted immediately before a hysterectomy for uncontrollable bleeding.

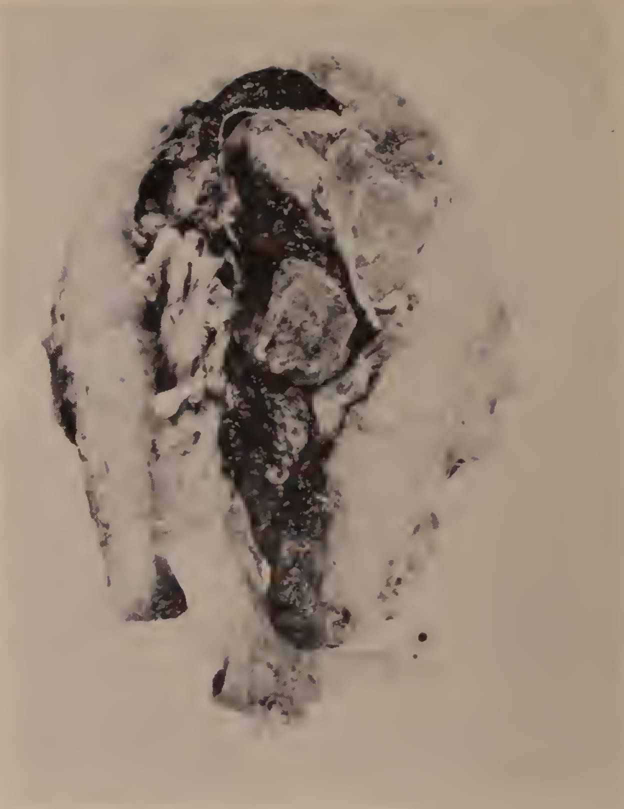
TABLE IV. Clinical Presentation and Treatment

Condition	No of cases	Percent
Hemorrhage	28	(100)
Delayed bleeding	5	(18)
Ruptured uterus	3	(11)
Postabortal hemorrhage	2	(7)
Twin pregnancy	1	(4)
Hysterectomy	23	(82)
Maternal death	0	(0)
Fetal death (trimester)	0	(0)
Subsequent normal pregnancy	1	(4)
Total cases	28	

In 12 of the 23 uteri, the myometrium was appreciably thinned at the site of placental attachment (Fig 1). In one, the placenta had penetrated through the myometrium to the urinary bladder; two uteri had ruptured during delivery (Fig 2). In 11 uteri, the placenta was not associated with significant myometrial attenuation (Fig 3). Seven of 11 uteri with a previous cesarean section had the attached placenta located in the fundal, posterior, or lateral regions. The placentas of the remaining four uteri were attached to the anterior wall. Three of the five patients with placenta previa accreta contained placental tissue adherent to the cervical wall (Fig 4); in the remaining two patients, the placenta was located at the internal cervical os and lower uterine segment.

Histopathologically, examination of all specimens showed contiguity of placental villi to myometrium with little or no intervening decidua basalis (Fig 5). The villi were sometimes embedded directly in myometrium, but more often a fibrin layer lay between the two (Fig 6 A,B). The myometrium immediately next to the villi or the fibrin layer was frequently hyalinized[1,9] and mixed with a varying number of decidual cells and cytotrophoblastic ("X") cells (Fig 7). This hyalinized layer of myometrium was in-

FIGURE 1. Case 11, placenta accreta (increta). The placenta penetrated through the myometrium, sparing the serosa. This 25-year-old gravida 2 para 1 patient had a previous cesarean section.



distinguishable from the compact layer of decidua basalis (Fig 8 A,B). The normal loose spongiotic layer of decidua basalis with varying numbers of atrophic endometrial glands (8A) and venous sinuses (8B) was invariably absent. In 16 cases, interdigitation of placental tissue and myometrial tissue was present in varying degrees. These digit-like projections of myometrium were occasionally quite large in 11 cases, and they were considered equivalent to the pseudosepta of placenta described by Irving and Hertig.[2] Some placental villi were seen in the myometrial venous sinuses. Seven of 11 uteri with a previous cesarean section demonstrated focal myometrial scars, two in the area of section and five distant from the site of section. Two additional uteri without previous cesarean section also had myometrial scars; one uterus had a previous curettage and the other was a uterus didelphys. Focal inflammatory reaction was observed in three cases, all of which showed necrotic villi. None of the 23 uteri had fibroids.

Placenta-only specimens. There were four placentas and one curetted specimen. The four placentas showed membranous fragments of juxtaposed myometrial tissue on the maternal surface. Microscopic findings were similar to those seen in the hysterectomy specimens (Fig 9). The largest fragments of attached myometrium ranged from 4 mm to 24 mm. One of the four patients subsequently required a curettage 11 days post partum for bleeding. Fragments of myometrial tissue with juxtaposed placental tissue were again demonstrated in the curettings.

The patient with only a curetted specimen had undergone manual removal of the placenta, which was not submitted for pathologic examination. Two weeks later she had a massive hemorrhage that required curettage. The curettings contained fragments of grossly identifiable placental tissue. Microscopically, a fragment of myometrium was seen apposed directly to the villi without intervening decidual tissue (Fig 10).

Control placentas. The maternal surfaces of all placentas were covered with compact decidua basalis and fragments of underlying loose spongiosa (Fig 11). The latter contained varying numbers of atrophic endometrial glands (Fig 8A) and venous sinuses (Fig

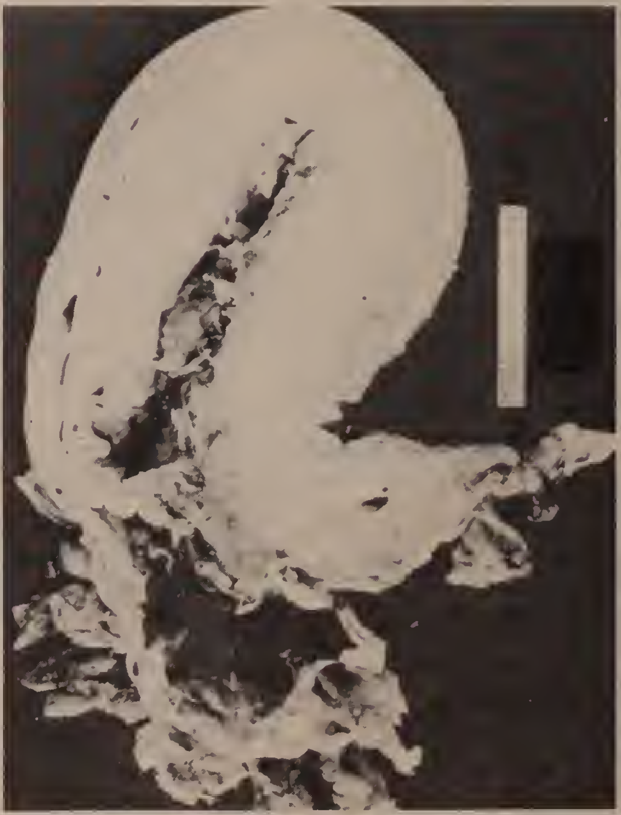


FIGURE 2. Case 9, placenta previa accreta. The uterus ruptured after the baby was delivered by cesarean section. Small irregular fragments of adherent placental tissue are discernible in the ruptured area. The 31-year-old gravida 4 para 1 patient had a history of cesarean section and placenta previa.

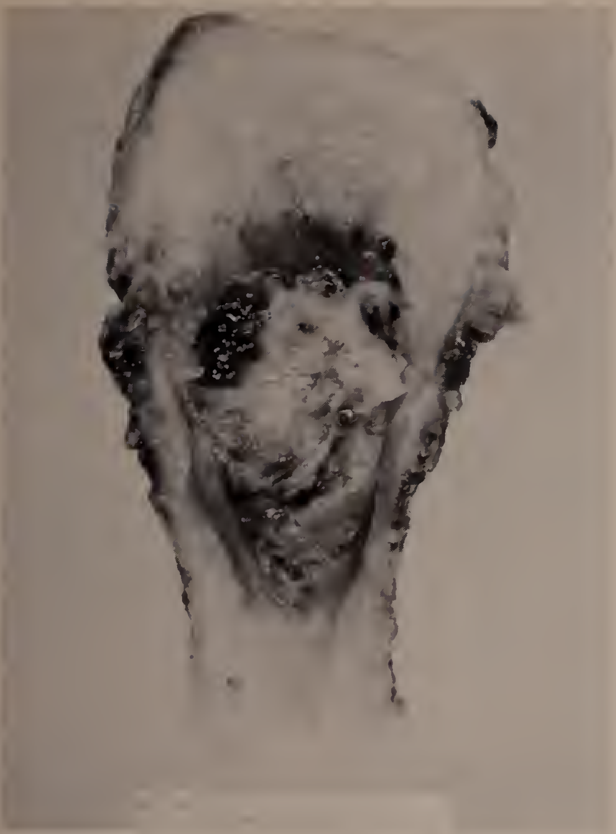


FIGURE 3. Case 28, placenta accreta (vera). The adherent placental tissue macroscopically presented as a placental polyp. There was no attentuation of the underlying myometrium. The 29-year-old gravida 6 para 0 patient presented with persistent uterine bleeding six weeks after abortion.

8B). When the spongiotic layer was absent, the maternal surface of the compact decidua basalis was covered by a single layer of spindle cells consistent with the endothelium of venous sinuses. None of the placentas showed myometrial tissue on the maternal surface.

Comment

Placenta accreta was defined by Irving and Hertig in 1937 as "the abnormal adherence, either in part or in whole, of the afterbirth to the underlying uterine wall". [2] They further attributed the adherence to a complete or partial absence of decidua basalis and thought that the failure to separate through the normal decidual plane could result in massive hemorrhage prompting a hysterectomy. Our 28 patients fulfilled the above criteria.

Abnormally adherent placenta has also been classified with respect to the extent of villous penetration[1–3,9,10] (Table V). Placenta accreta vera refers to the attachment of villi to myometrium, without invasion of the muscle. Placenta increta refers to the penetration of villi into the muscle, but not through the full thickness of the myometrium. Finally, placenta percreta denotes full-thickness penetration of villi with possible attachment to other organ structures, eg, bladder. This classification has been criticized on the grounds that it does not take into account focal or partial adherence and that the degree of villous penetration is rarely uniform.[1,3]

Examination of our 23 hysterectomy specimens showed identical histopathologic changes at the uteroplacental interface, regardless of the extent of gross myometrial invasion by the placenta. Therefore, the differentiation of placenta accreta vera and placenta increta depended upon absence or presence of macroscopic thinning of myometrium. As shown in Fig 1, the peripheral margin of placental invasion into the myometrium was often poorly demarcated. Unless the area of myometrial thinning was distinctly thinner than the uninvolved area, it was impossible to separate placenta increta from placenta accreta. There was no controversy in recognizing our case of placenta percreta because the penetration of the

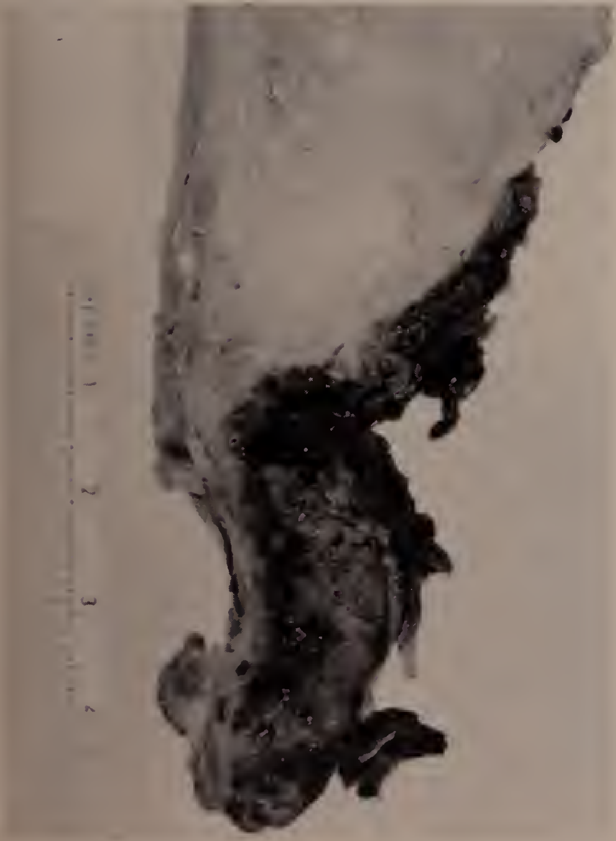


FIGURE 4. Case 5, placenta previa accreta. The placental tissue was adherent to the cervical wall, which was markedly attenuated. The placenta failed to separate after the baby was delivered vaginally at 26 weeks' gestation. The 34-year-old gravida 6 para 4 patient had undergone three previous cesarean sections.

TABLE V. Subclassification of Placenta Accreta

Accreta vera	16
Increta	11
Percreta	1
Total cases	28

placenta to the bladder was demonstrated in situ clinically. Due to the retrospective nature of this study, it was impossible to determine whether the two specimens of placenta increta with rupture should actually have been classified as placenta percreta, because the exact locations where the sections were taken were not clear. In both instances, the rupture was observed during delivery and, therefore, the specimens were arbitrarily classified as placenta increta.

Another classification reflects the severity of placental adherence, described as total, partial, or focal. In total accreta, the entire surface of the placenta is adherent. In partial accreta, one or more cotyledons are involved, and in focal accreta, as exemplified by our case of postabortal placental polyp, portions of lobes are involved.[1,3] The inadequacies of this classification are evident when one realizes that histologic examination of the placenta is rarely complete and that manual removal distorts uteroplacental relationships. The term "placenta accreta" has been applied, therefore, to all variants of adherent placenta.[1]

Incidence

The incidence quoted in the literature is quite varied. Althabe and Althabe[11] reported an incidence of one in 93,000, while Sumawong et al[3] reported one in 540. The true incidence probably lies somewhere between these two figures. Breen et al,[7] in a review, found one in 7,000 as an overall incidence. If one excludes clinically diagnosed cases (ie, those not confirmed by histopathologic examination of the uterus), the incidence is lower.[1,8] However, if cases based on clinical grounds are included, a much higher incidence can be anticipated, as demonstrated by Read et al,[8] who found an incidence of one in 4,027 based only on pathology examinations and an incidence of one in 2,562 based on clinically diagnosed cases. As demonstrated in this review, a substantial number of cases (18%) were diagnosed clinically and confirmed by placental pathology only, thus supporting Read's observation. The incidence of 1 in 3,570 in our hospital included patients who had undergone hysterectomy and those with clinical diagnosis confirmed by placental pathology. Therefore, the incidence was comparable to that reported by Read et al. We consider the higher incidence (1/1,956) in Irving and Hertig's series[2] to be due to the special nature of their hospital as a referral center.

As in previous reviews,[1,8] certain associated factors kept recurring. Older age with high gravidity remained the typical clinical background (Table II). Also included was the high association between adherent placenta and previous intrauterine manipulation (Table III), especially cesarean section and uterine curettage.[1,2,8] Between 1956 and 1970 (during which time 49,169 deliveries occurred in our hospital and the overall incidence of placenta accreta was 1/7,605), only two of our eight cases had previous cesarean sections. After 1970 (53,006 deliveries were performed and the overall incidence of placenta accreta was 1/2,475), 11 of the 20 cases had previous cesarean sections, which was more than double the earlier frequency. Fox had found a 25% incidence of cesarean section during the period 1945 to 1969, substantially lower than the current study's 46% or Read's 43%.[8] Read's study was from 1975 to 1979, a period during which, we found, there was an increased frequency of placenta accreta. Read[8] also concluded that an increasing incidence of placenta accreta was occurring over recent years, which he attributed to the increasing frequency of associated factors, such as cesarean section. Although previous cesarean section has been implicated in the higher incidence of placenta accreta, the adherent placental tissue did not center around the previous cesarean section scars in many of our cases. Seven of 11 cases had the adherent placenta located primarily in the fundal, posterior, or lateral regions, which were not the site of customary cesarean section. In the remaining four, the placenta was attached to the general area of previous section; in one of these four, the attachment extended to the posterior wall. Our findings were in line with the previous reports in the literature.[1,9] A weakening or deficiency of the scar may have facilitated invasion, but more than the area of the scar was invaded.[10]

The incidence of previous curettage in this study was a very high 64%, as compared with Fox's 30% and Read's 27% (Table III). If one were to look at this statistic alone, one might anticipate a higher incidence of placenta accreta in our series. However, that was not the case, because our combined incidence of previous curettage and cesarean sections was comparable to that of Read's series (Table III). The high incidence of curettage and cesarean section tends to implicate intrauterine surgical manipulation as a possible etiologic factor. Another possible explanation for the increased incidence may be better clinical awareness.

Histopathologic findings

Our pathologic study confirmed the findings reported in the earlier literature.[2,9] Regardless of the extent of villous penetration into myometrium, the histopathologic changes of placenta accreta were similar, with deficiency or absence of decidua basalis. There were no discernible villous abnormalities. When the villi were juxtaposed directly to an entirely normal myometrium (Fig 5A), the diagnosis was unequivocally established. Confusion arose when

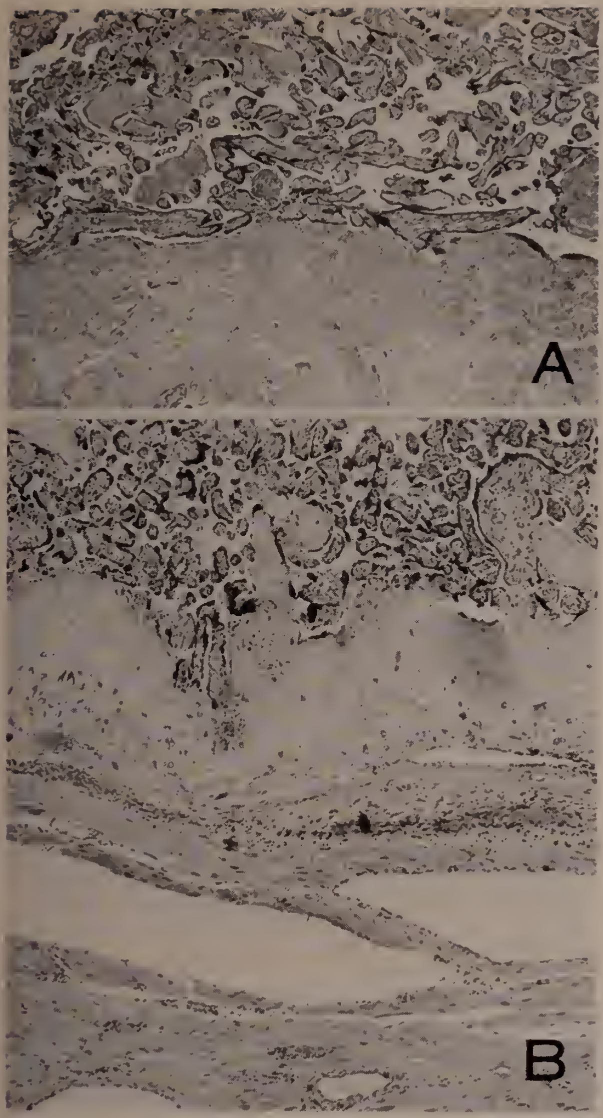
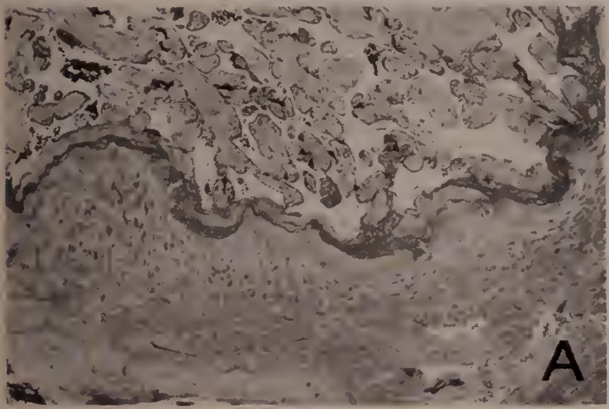


FIGURE 5. (A). Case 1, placenta accreta. The chorionic villi juxtaposed directly to the myometrium (hematoxylin and eosin stain × 37). (B) Case 15, the myometrium immediately next to the villi was frequently hyalinized. This layer was frequently indistinguishable from compact decidua basalis. The spongy layer of decidua basalis was invariably absent (hematoxylin and eosin stain × 70).

there was a fibrinous layer or a hyalinized layer of myometrium separating the villi and the normal myometrium (Figs 5B, 6A, B, 7), the most common histopathologic findings in placenta accreta. Most specimens contained a layer of fibrin, perhaps corresponding to what has been called Nitabuch's layer, between the uterine wall and the adherent placenta. The fibrin layer was sometimes attenuated or discontinuous, but it did not seem likely that absence of a fibrin layer was responsible for the placental adherence. The hyalinized layer of myometrium was indistinguishable from compact decidua basalis.

Morison[10] based histologic diagnosis of placenta accreta on demonstrating nonvillous trophoblastic cells, which lack reticulin fibers, in the myometrium. He thought that the silver impregnation method of Foote counterstained with hematoxylin and eosin was valuable in this regard. Our study, however, confirmed the original observation by Irving and Hertig,[2] which was supported by others,[1,9] that the undue adherence was due to complete or partial absence of decidua basalis. In case of partial absence, the spongiotic decidua basalis was absent.[2] The



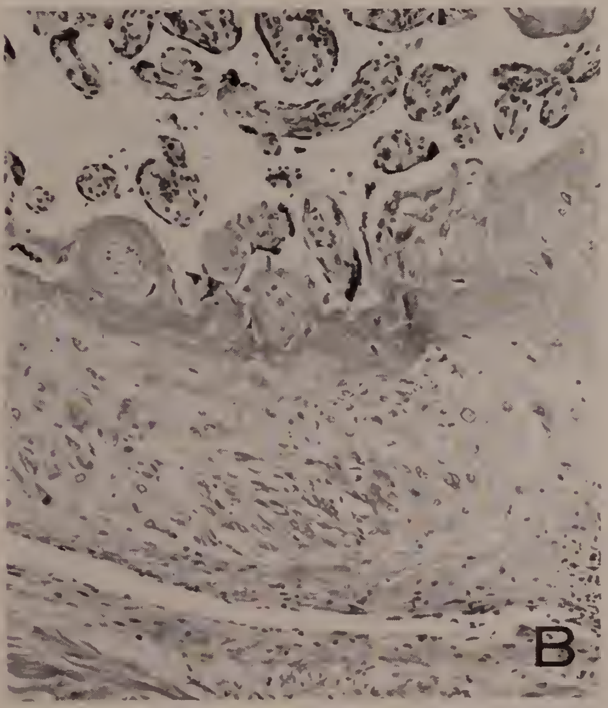
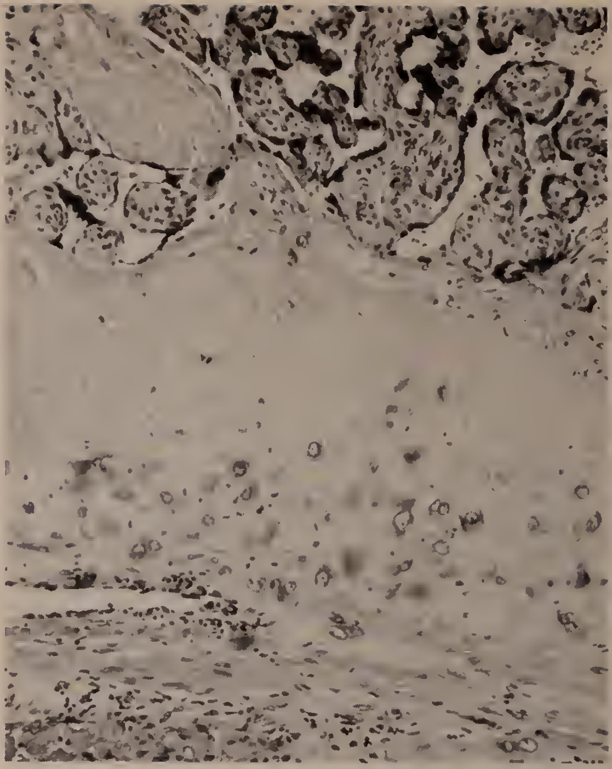


FIGURE 6. (A). Case 11, placenta accreta. A fibrin layer was often present between the villi and myometrium (hematoxylin and eosin stain × 37). (B) Case 20, higher magnification of a section from a different uterus with similar changes (hematoxylin and eosin stain × 135).

FIGURE 7. Case 15, placenta accreta. The myometrium next to the villi was hyalinized. There were a few scattered cytotrophoblastic "X" cells and decidual cells (hematoxylin and eosin stain × 135). This hyalinized layer was indistinguishable from the normal compact decidua basalis shown in Figs. 8 and 11.

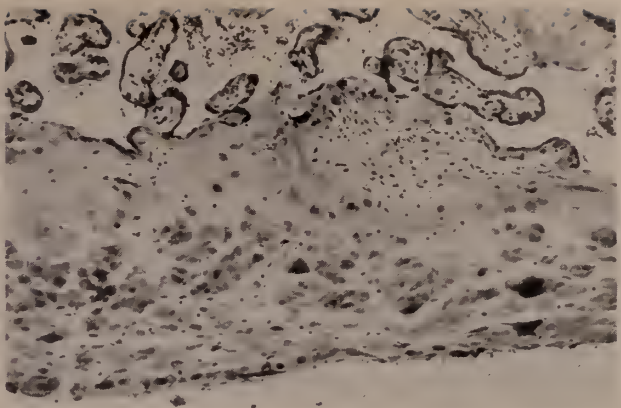


distinction between nonvillous trophoblast and decidua seems inconsequential for the diagnosis of placenta accreta. We have found normal placentas to be adequate for a control study. Our histopathologic examination of 50 normal placentas confirmed the previous observation that the separation of placenta from uterus took place in the loose spongiotic layer of decidua basalis.[2,9] Therefore, the maternal surface of normal control placentas was mostly covered with the compact layer of decidua basalis with attached small fragments of spongiotic layer (Fig 11). No myometrial tissue was seen on the maternal surface of any of the 50 control placentas.

After the nature of the pathologic changes in placenta accreta was clarified, the histopathologic diagnosis based on the curetted or manually removed placentas became possible (Figs 9, 10). In fact, the histopathologic confirmation of the diagnosis based on placental pathology alone has been done in the past.[2] The fact that our five cases (18%) did not require hysterectomy supports the use of conservative treatment on selected patients. Conservative treatment includes volume replacement, uterine massage, oxytocics, curettage, prostaglandins, and if necessary to control bleeding, hypogastric artery ligation.[12] One of our patients subsequently expe-

FIGURE 8. Normal decidua basalis. (A) Compact and loose spongiotic decidual tissues were arranged in layers. There were a few atrophic endometrial glands near right lower corner. (B) Large venous sinuses were also present in the spongiotic layer of decidua basalis. (Both figures, hematoxylin and eosin stain × 54).

FIGURE 9. Case 25, placenta accreta diagnosed on placenta-only specimen. The maternal surface of the placenta was covered with a membranous fragment of myometrial tissue, separated from the placenta by a hyalinized layer mixed with individual decidual cells and cytotrophoblastic "X" cells (hematoxylin and eosin stain X 92).



rienced a normal pregnancy. Similar examples have occasionally been reported in the literature.[1]

Two of five patients with prolonged or delayed postpartum hemorrhage had pathologic findings of placenta accreta on curetted placental tissue; in one of the two, the placenta was manually removed 11 days earlier, and it also showed the changes of placenta accreta. Our experience in these two cases leads us to believe that the underlying cause of retained secundines in many patients is placenta accreta.[9]

Irving and Hertig[2] described two cases of incidental placenta accreta found on histologic examination of the uteri removed for other causes. We excluded from our control series a placenta that might also be classified as an incidental placenta accreta. The maternal surface of the placenta contained small aggregates of myometrial fibers with deficient decidua basalis. The largest aggregate was less than 1 mm in size. The 30-year-old gravida 2 para 1 mother underwent a repeat cesarean section at 30 weeks' gestation. The area of old incision was markedly attenuated and hemorrhagic. The placenta did not separate spontaneously and had to be removed manually in a piecemeal fashion. The postpartum course was uneventful. Retrospectively, the clinical findings were considered compatible with placenta accreta. This case illustrates that a careful pathologic examination might uncover mild cases.

The case of postabortal placenta accreta merits special consideration. The patient had experienced six pregnancies, all of which terminated in abortion. The observations confirm the previous report that placenta accreta could occur early in gestation.[2,9] Instrumentation of the uterus might have been the cause of placenta accreta in this patient, but an inherently abnormal endometrium that prevented the patient from normal conception might have been equally responsible.

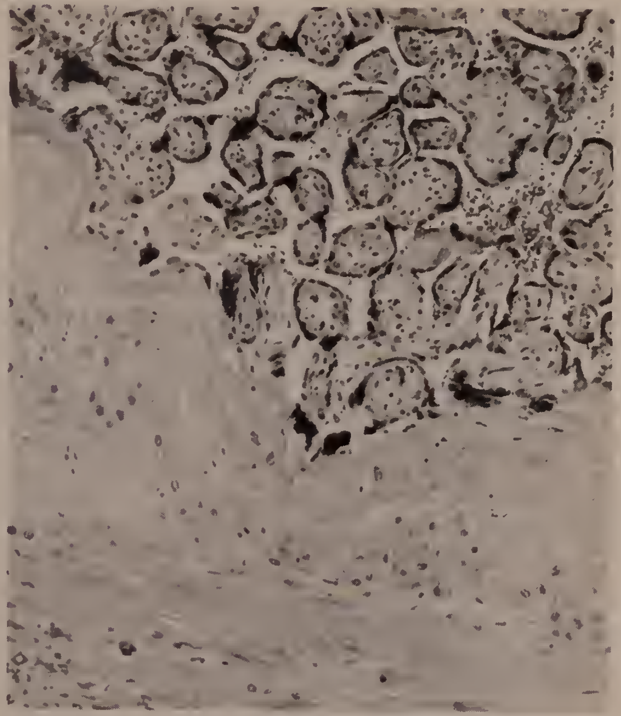


FIGURE 10. Case 27, placenta accreta diagnosed on curetted specimen. The villi were apposed directly to the fragment of myometrial tissue, with foci of compact decidua (hematoxylin and eosin stain X 135).

Summary

Clinicopathologic study of 28 patients with placenta accreta, from a single large community hospital, confirmed the previous observation that the failure of placental separation was due to deficiency

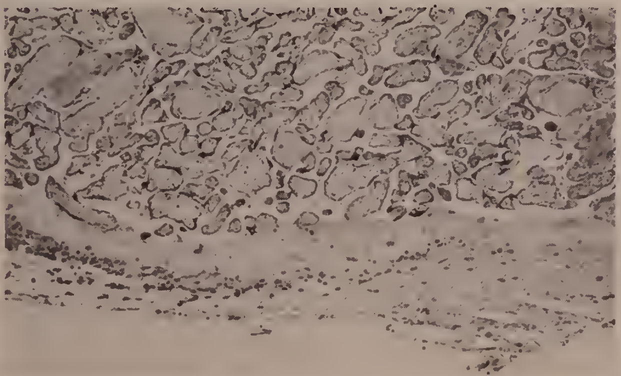


FIGURE 11. Maternal surface of a representative control placenta. Compact and loose spongiotic layers of decidua basalis were present. Atrophic endometrial glands and small venous sinuses were shown at right lower corner (hematoxylin and eosin stain X 37).

or absence of decidua basalis. The incidence in this series was 1 in 3,570 deliveries. Older age with high gravidity was the usual clinical background. The majority of patients (64%) had a history of previous curettage and/or cesarean section. The study further confirmed that placental tissue removed manually or by curettage could be examined for evidence of placenta accreta when clinically there was abnormal placental adherences or retention with postpartum hemorrhage. Examination of 50 control placentas showed layers of compact and spongiotic decidua basalis; none had myometrial tissue adherent to the maternal surface.

Acknowledgment. We would like to thank Dr. William B. Ober, Director of Laboratories, Hackensack Hospital, Hackensack, New Jersey, for his critical reading of the manuscript.

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First, the patient wants a physician who will be there when he wants him. What good is the best of physicians if he is not there when panic strikes?

"I need a doctor; he need not be the most outstanding physician. If only he will do no harm, then maybe 'nature' will take care of me and get me well on my own." This really implies that the doctor will be on call day and night, seven days a week throughout the year. "Why should the doctor take a vacation while I am sick? If he is my caretaker then let him take care of me!"

Above all, the patient wants the physician who has *time* to listen and to answer questions as well; he wants him to look and diagnose pronto and to cure forthwith! At least he should give comfort when the cure is not at hand. Of course all want their physicians always to make the exact diagnoses. On this score it is only fair to note that many patients are quite impatient with the numerous tests required, for "always there are more tests and more consultations." With the "instant diagnosis," the patient would like to have "instant cure."

It must be stated specifically that the sick want the physician who never errs at all — for if he makes an error, or an unforeseen complication ensues which follows naturally from the disease itself, or from the therapy which is necessary — then soon enough the law takes over! There are plenty of lawyers all too ready and willing to sue, and who often prompt the patient to initiate an action. Now of course all patients want their physicians to be the best trained, the most experienced, and the best qualified! When health is concerned and life is at stake, the best is none too good!

The patient wants his doctor to be pediatrician, surgeon, gynecologist, and all other specialists rolled into one, as well as the family practitioner and family physician ready to give advice on all subjects, mental, social, and moral too, including such questions as medical school admissions, and also how to prevent experimentation with drugs.

The patient wants his doctor to take care of him till old age, and then soften the blow of death, even though he smokes, drinks, and eats all he wants all day long. "If I abuse my body, it is the duty of the doctor to undo the harm and make me sound and healthy. He is my doctor and that is his duty, no matter what crimes I personally commit against my body." This kind of patient always resents the expense as well as the loss of time inherent in getting necessary multiple opinions.

From the above it can be seen that the desired physician is an impossible human being. Perfection incarnate is quite unreal and impossible in this sad very imperfect world. The trouble is that such a doctor exists only in Heaven! But in heaven there is no illness; so there is no place for him there either. In expecting and asking for the impossible, we often get less than we are due, as well as much less than we expect.

ALFRED A. ANGRIST

What type of being should the physician be?
New York State Journal of Medicine 1972;10:2403.

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Aspiration Cytology of the Breast

An analysis of 865 cases

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Huntington Hospital is a 424-bed community hospital located on the north shore of western Suffolk County. The hospital has an active surgical service, and since 1972 there has been a marked increase in the number of specimens submitted for diagnostic evaluation obtained by aspiration from various sites, both deep and superficial, particularly the breast. During a five-year period from January 1976 to December 1980, the authors examined, evaluated, and reported a total of 865 cases of breast aspiration specimens (solid and cystic lesions).

Material and Method

The size of the needles used varied from one surgeon to another, but for the most part a 20- or 22-gauge size was utilized. The specimens were fixed in 70% alcohol. The diagnoses rendered were descriptive, with broad categories of negative, suspicious, and positive. The comments made in those cases that were suspicious or positive were explanatory, indicating what was suspected or what kind of tumor was being diagnosed. A majority of the patients studied had biopsy or a more definitive surgical procedure performed as indicated.

Follow-up was obtained in a majority of the cases listed as suspicious or positive. In addition, in order to analyze the false-negatives, the charts of all the patients who had any form of breast surgery during this period were also reviewed and the findings tabulated and correlated.

Results

During the five-year period of the study, a total of 865 cases of breast tumors, solid and cystic, were examined by aspiration cytologic methods. The Table shows a breakdown of these cases by year and suspicious and positive diagnoses; follow-up is included when available. The analytic conclusions concerning accuracy and false-negative and false-positive results are as follows:

- Of the 21 cases that were diagnosed as positive for carcinoma and had subsequent biopsies or more definitive surgery, 18 proved to be carcinomas of various types. Three cases proved benign on histologic examination. Of these, two had proliferative changes, and the third was a fibroadenoma. This gives an accuracy rate of 85.71%.

- Of the 27 cases that were diagnosed as suspicious for malignancy and had subsequent biopsies or more definitive surgery, 15 proved to be carcinomas of various types, yielding a 55.55% accuracy rate. Of the remaining 12 cases, 3 had sclerosing adenosis, 3 had fibroadenomas, and 1 had a duct papilloma.

- When all cases diagnosed as suspicious or positive were combined and analyzed, the accuracy rate was 69.12% (33 of 48).

- Of a total of 802 cases that were reported as negative for malignant cells, there were 15 that proved malignant histologically. This gave a false-negative percentage rate of 1.87%.

Comment

Although there has been a marked increase in the use of aspiration cytologic methods in the diagnosis of tumors at various sites, the procedure is not new and was in use at Memorial Hospital, New York, in the 1930s. Several large series have been reported in the literature concerning the diagnostic accuracy, histocytologic correlation, and pitfalls of this method.[1–4]

We became interested in the subject in 1971, and have seen an increasing volume of specimens each year since. We have kept accurate records of our diagnoses in order to be able to evaluate our interpretation. With experience, and after attending several regional and national workshops, we have become able to diagnose the aspirates with accuracy and have virtually eliminated false-positive reports in the past three years.

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Breast Tumors Examined by Aspiration Cytologic Methods January 1976–December 1980

	1976	1977	1978	1979	1980	TOTAL
Cytology Diagnosis						
Negative	63	125	172	233	209	802
Histology Diagnosis						
Adenocarcinoma	0	2	3	2	8	15
No record	63	123	169	231	201	787
Cytology Diagnosis						
Suspicious	2	7	10	13	6	38
Histology Diagnosis						
Adenocarcinoma	0	3	3	7	2	15
Lobular carcinoma	0	0	0	0	0	0
Sclerosing adenosis	0	1	1	1	0	3
Fibroadenoma	0	0	2	1	0	3
Fibrocystic disease	1	0	2	0	0	3
Duct papilloma	0	1	0	0	0	1
Other benign process	0	0	1	1	0	2
No record	1	2	1	3	4	11
Cytology Diagnosis						
Positive	1	3	3	13	5	25
Histology Diagnosis						
Adenocarcinoma	1	1	1	12	2	17
Lobular carcinoma	0	0	0	0	1	1
Fibroadenoma	0	1	0	0	0	1
Sclerosing adenosis	0	0	2	0	0	2
No record	0	1	0	1	2	4

It is extremely important to have a good rapport with the surgical team that is providing the specimens. The working understanding that we have with our surgical team may be summarized as follows:

- If the breast mass is clinically suspicious, it should be biopsied, even if the aspiration cytology report is negative.
- If the aspiration cytology report is suspicious or positive, the breast mass should be biopsied, even if the mass is not particularly suspicious for malignancy clinically.
- A positive aspiration cytology report should not be used as a substitute for a frozen section, as a rule.

With this kind of working understanding, we feel that we are succeeding in our goal of providing the surgeons with a diagnostic adjunct in the management of their patients.

With experience, we have been able to detect and define a pattern for fibroadenoma on aspiration cytologic examination, and this has been confirmed on several occasions. As all experienced cytopathologists and cytotechnologists know, a single cluster of cells is totally inadequate for an accurate diagnosis, particularly in an aspiration specimen. We emphasize the following when reviewing and evaluating these specimens:

- background
- cellularity
- cellular arrangement
- other cellular elements, eg, blood, adipose tissue, fibrous tissue
- cellular size variation and chromatin pattern
- clinical history, particularly the age of the patient

In fibroadenomas, the background is almost always clean, with no necrosis. The cellular elements are almost all epithelial in varying sized stellate and small irregular clusters, with almost no cellular variation in size and shape (Figs 1, 2, 3). There is a diffuse homogeneous and bland chromatin pattern with no significant clumping. The cells are in tight,

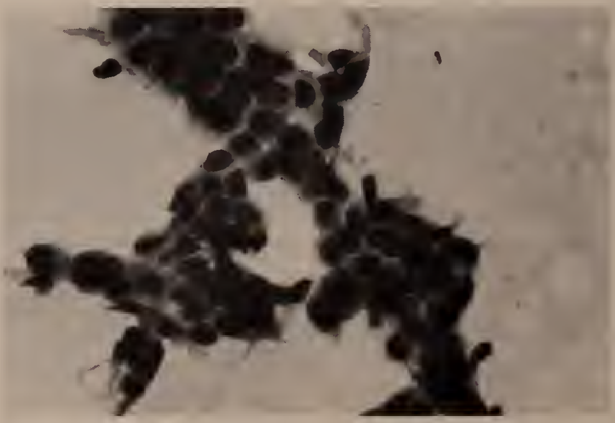

FIGURE 1. Fibroadenoma of breast. Note the stellate pattern with uniformity of cells and nuclei, clear background with no nuclear debris.

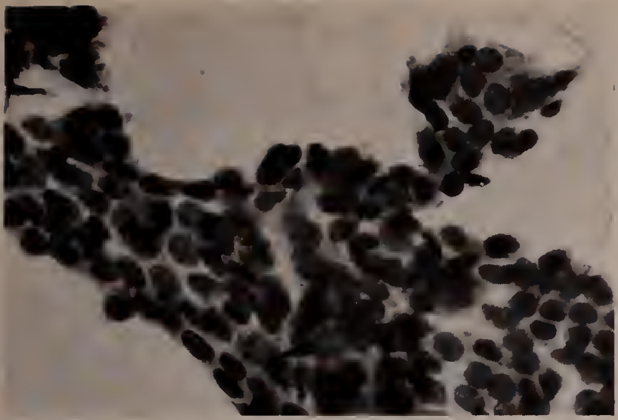

FIGURE 2. Fibroadenoma of breast (same case as Figure 1). The nuclear chromatin is homogeneous and the nuclei are uniform. Note the cohesiveness of the cells.

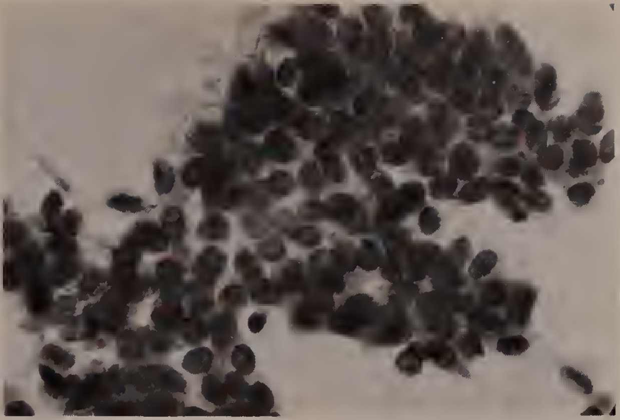

FIGURE 3. Fibroadenoma of breast (same case as Figure 1). Note the nuclear uniformity.

cohesive clusters. There are a few RBCs and rare single epithelial cells, but there are generally no granular macrophages and no granular amorphous material of cystic disease pattern. When these latter elements are present, we have found it to be a case of fibrocystic disease with proliferative changes and duct hyperplasia. In sclerosing adenosis, the clusters are smaller, and generally have no stellate irregular borders. In addition, fibrous and adipose tissue fragments are frequently found. In lobular carcinomas, the clusters of cells sometimes show features seen in fibroadenomas, but lack of cohesiveness and chromatin clumping help a great deal in differentiation (Figs 4, 5). Intraductal papillomas may resemble a fibroadenoma pattern, but a careful examination that shows the fibrous stroma of the papilloma will serve to establish the diagnosis. The cytologic patterns seen in carcinomas and fibrocystic disease are all well documented in the recent literature.

Summary

A five-year experience with aspiration cytology of breast tumors and their histologic correlation, in a medium-sized community hospital, is discussed. A close working relationship with the surgical staff is emphasized. The cytologic patterns seen in benign diseases, particularly fibroadenomas, are discussed and elaborated.

Acknowledgment. The authors wish to thank Mrs. Sheila Delaney for secretarial assistance and Mrs. Kay Clemens of Medical Records for her assistance in reviewing charts.

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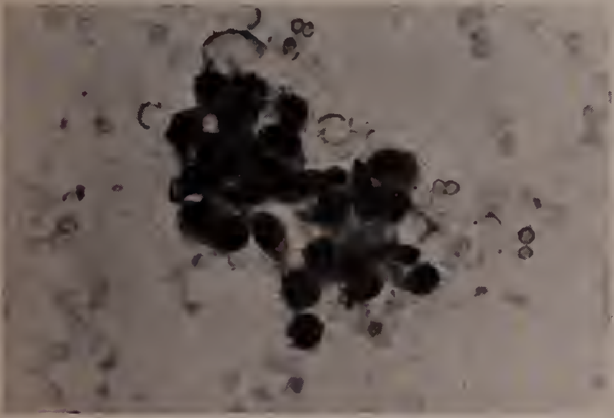

FIGURE 4. Carcinoma of breast. Note the necrotic background and lack of cohesiveness and cellular uniformity.

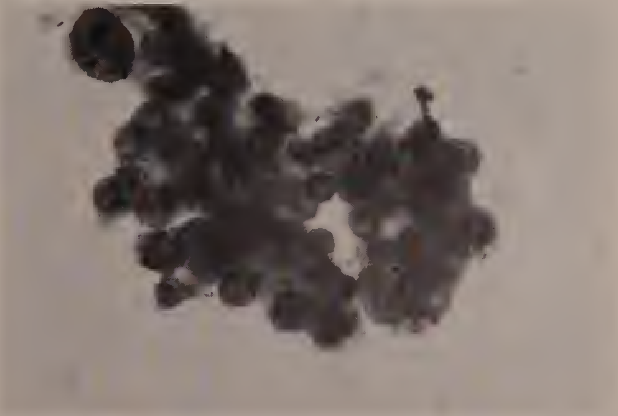

FIGURE 5. Carcinoma of breast. Note the variation in size and shape of nuclei and the irregular clumping of chromatin.

. . . in June 1970 receiving his Honorary Doctor of Science

Surrounded by well-wishers and friends . . . .

Dr. and Mrs. Samuel Belkin, Dr. and Mrs. Alfred A. Angrist

with those he loves . . .

Residents Basil Mounges and Jacque Wallack at Queens General Hospital . . . and Dr. Robert Terry.

. . . doing what he loves

Dr. Alex Novikoff and Dr. Alfred Angrist

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■

Obituaries

Gregory I. Altschuller, M.D., of New York City died on February 25, 1983 at the age of 88. He graduated in 1925 from the Deutsche Universitat Medizinische Fakultat, Prague. Dr. Altschuller was a member of the Academy of Medicine, the New York County Medical Society, and the Medical Society of the State of New York.

Benjamin Apfelberg, M.D., of Forest Hills died on January 10, 1983 at the age of 86. He was a 1920 graduate of Long Island College Hospital (State University of New York Downstate Medical Center) and a member of the American Psychiatric Association, the Medical Society of the County of Queens, and the Medical Society of the State of New York. Dr. Apfelberg was a Diplomate of the American Board of Psychiatry and Neurology.

Nicholas P. Appy, M.D., of New York City died on February 15, 1983 at the age of 83. He was a 1925 graduate of Columbia University College of Physicians and Surgeons. Dr. Appy was a member of the American Academy of Family Practice, the American Geriatrics Society, the New York County Medical Society, and the Medical Society of the State of New York.

Constance M. Barwise, M.D., of Orient died on February 5, 1983 at the age of 79. She was a 1928 graduate of Western Reserve University School of Medicine. Her memberships included the American Psychiatric Association, the Suffolk County Medical Society, and the Medical Society of the State of New York.

Morris H. Berg, M.D., of Roslyn died on February 22, 1983 at the age of 33. Dr. Morris graduated in 1975 from Johns Hopkins University School of Medicine. He was a Diplomate of the American Board of Internal Medicine and a member of Nassau County Medical Society and the Medical Society of the State of New York.

Daniel P. Cahill, M.D., of Jamaica died on January 28, 1983 at the age of 67. He graduated from Georgetown University School of Medicine in 1941 and was a member of the American Academy of Family Practice. Dr. Cahill was also active with the Medical Society of the County of Queens and the Medical Society of the State of New York.

Peter K. Cobin, M.D., of Yonkers died on February 13, 1983. He was 81 years of age. Dr. Cobin graduated in 1926 from Columbia University College of Physicians and Surgeons. His memberships included the Westchester County Medical Society and the Medical Society of the State of New York.

Henry C. Domb, M.D., of Roanoke, Virginia died on January 20, 1983. He was 75 years old. He was a 1935 graduate of the Friedrich-Wilhelms-Universitat Medizinische Fakultat, Berlin, Prussia. His memberships included the American Geriatrics Society, the American School Health Association, the Suffolk County Medical Society, and the Medical Society of the State of New York.

Benjamin Friedman, M.D., of New York City died on February 24, 1983 at the age of 83. He was a 1924 graduate of New York University College of Medicine. Dr. Friedman was a Fellow of the American College of Surgeons, a Diplomate of the American Board of Ophthalmology, and his memberships included the Academy of Medicine, the New York Society for Clinical Ophthalmology, the American Academy of Ophthalmology and Otolaryngology, the American Geriatrics Society, the New York County Medical Society, and the Medical Society of the State of New York.

Joseph H. Fries, M.D., of Brooklyn died on December 20, 1982 at the age of 80. In 1929 he graduated from Columbia University College of Physicians and Surgeons. Dr. Fries was a member of the American Academy of Allergy, the American Academy of Pediatrics, the Society for Experimental Biology and Medicine, the Nassau County Medical Society, and the Medical Society of the State of New York. He was a Fellow of the American College of Physicians and the American College of Allergists, and a Diplomate of the American Board of Pediatrics and the American Board of Anesthesiology.

Jacob Gantman, M.D., of Fort Lauderdale, Florida died on December 18, 1982. He was 74 years old and a 1935 graduate of the Friedrich-Wilhelms-Universitat Medizinische Fakultat, Berlin, Prussia. Dr. Gantman was a member of the Bronx County Medical Society and the Medical Society of the State of New York.

Paul H. Garvey, M.D., of Rochester died on January 15, 1983. He was 85 years of age and a 1923 graduate of the University of Michigan Medical School. Dr. Garvey was a member of the Academy of Medicine, the American Academy of Neurology, the American Association of Neurological Surgeons, and a Diplomate of the American Board of Psychiatry and Neurology. He was also a member of the Medical Society of the County of Monroe, Inc. and the Medical Society of the State of New York.

Jacob William Goldenkranz, M.D., of the Bronx, died on January 7, 1983 at the age of 86. He was a 1920 graduate of Long Island College Hospital (State University of New York Downstate Medical Center) and his memberships included the American Academy of Family Practice, the American Geriatrics Society, the Bronx County Medical Society, and the Medical Society of the State of New York.

Maurice David Grant, M.D., of Riverdale, died on July 27, 1982. He was 75 years of age. In 1930 he graduated from New York University College of Medicine. His memberships included the American Academy of Otolaryngology, the American Academy of Facial Plastic and Reconstructive Surgery, the Bronx County Medical Society, and the Medical Society of the State of New York. Dr. Grant was a Diplomate of the American Board of Otolaryngology.

Monroe E. Greenberger, M.D., of New York City died on December 15, 1982 at the age of 86. In 1918, Dr. Greenberger graduated from New York University College of Medicine. His memberships included the Academy of Medicine, the American Urological Association, the New York County Medical Society, and the Medical Society of the State of New York. He was a Qualified Fellow of the International College of Surgeons.

Paul Gross, M.D., of New York City died on January 31, 1983 at the age of 90. He graduated in 1918 from the Universita Karlova Fakulta Lekarska, Prague. His memberships included the Academy of Medicine, the New York State Dermatological Society, the American Academy of Dermatology, the Society for Investigative Dermatology, the New York County Medical Society, and the Medical Society of the State of New York. Dr. Gross was a Diplomate of the American Board of Dermatology, Inc.

Frederic J. Heilbroner, M.D., of Putnam Valley died on January 22, 1983 at the age of 88. He was a 1924 graduate of the Ludwig-Maximilians-Universitat Medizinische Fakultat, Munchen, Bavaria. His memberships included the New York County Medical Society and the Medical Society of the State of New York.

Walther Heldt, M.D., of Buffalo died on October 15, 1982. He was 86 years old. He was a 1921 graduate of the Friedrich-Wilhelms-Universitat Medizinische Fakultat, Berlin, Prussia. Dr. Heldt was a member of the Medical Society of the County of Erie and the Medical Society of the State of New York.

Thomas Iovino, M.D., of Great Barrington, Maine died on February 13, 1983 at the age of 86. He graduated from the Long Island College Hospital (State University of New York Downstate Medical Center) in 1921. Dr. Iovino was a Diplomate of the American Board of Obstetrics and Gynecology, a Fellow of the American College of Obstetrics and Gynecology, and a Fellow of the American College of Surgeons. His memberships included the New York County Medical Society and the Medical Society of the State of New York.

Morton A. Jacobson, M.D., of Hastings-on-Hudson died on February 27, 1983 at the age of 72. He graduated from the New York Medical College, Flower and Fifth Avenue Hospitals in 1936. Dr. Jacobson was a member of the Academy of Medicine, Westchester County Medical Society, and the Medical Society of the State of New York.

Isidore A. Kramer, M.D., of Hempstead died on February 24, 1983. He was 75 years of age and a 1933 graduate of the New York Medical College, Flower and Fifth Avenue Hospitals. Dr. Kramer was a member of the Nassau County Medical Society and the Medical Society of the State of New York.

Edward R. H. Kurz, M.D., of Brooklyn died on February 20, 1983 at the age of 76. He was a 1931 graduate of Columbia University College of Physicians and Surgeons. His memberships included the New York Cardiological Society, the American Geriatrics Society, the Medical Society of the County of Kings, and the Medical Society of the State of New York. Dr. Kurz was a Fellow of the American College of Angiology, the American College of Cardiology, the American College of Physicians, and the American College of Chest Physicians. He was a Diplomate of the American Board of Internal Medicine.

Alfred E. Lazar, M.D., of Hartsdale died on February 3, 1983. He was 76 years old and a 1932 graduate of New York University College of Medicine. Dr. Lazar was a member of the Bronx County Medical Society and the Medical Society of the State of New York.

Morris E. Missal, M.D., of Rochester died on January 19, 1983 at the age of 83. He was a 1924 graduate of the Harvard Medical School. His memberships included the Academy of Medicine, Medical Society of the County of Monroe, and the Medical Society of the State of New York. Dr. Missal was a Fellow of the American College of Physicians and a Diplomate of the American Board of Internal Medicine.

Maurice Morrison, M.D., of Brooklyn died on December 16, 1982. He was 87 years of age and a 1917 graduate of Long Island College Hospital (State University of New York Downstate Medical Center). His memberships included the New York State Society of Internal Medicine, the American Society of Clinical Pathologists, the International Society of Hematology, the Medical Society of the County of Kings, and the Medical Society of the State of New York. He was a Fellow of the American College of Physicians and a Diplomate of the American Board of Internal Medicine.

Edward P. Petreshock, M.D., of North Babylon died at the age of 37. He graduated in 1970 from the State University of New York Downstate Medical Center. His memberships included the American Gastroenterological Association, the Suffolk County Medical Society, and the Medical Society of the State of New York. Dr. Petreshock was a Fellow of the American College of Physicians and a Diplomate of the American Board of Internal Medicine.

Howard B. Rasi, M.D., of Brooklyn died on February 19, 1983. He was 65 years of age and a 1943 graduate of the New York Medical College, Flower and Fifth Avenue Hospitals. His memberships included the Academy of Medicine, the American Society of Plastic and Reconstructive Surgery, the American Society of Maxillofacial Surgeons, the Pan American Medical Association, the Medical Society of the County of Kings, and the Medical Society of the State of New York. Dr. Rasi was a Fellow of the American College of Surgeons and a Diplomate of the American Board of Plastic Surgery.

Postscript. *The post-graduate education advertisements seen on pages 373 and 375 of the March 1983 issue are not current courses being offered. The notices originally appeared in the June 1925 and September 1, 1951 issues of our* **Journal.**

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*WARNING: May be habit forming
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Warnings: Drug Dependence: Codeine can produce drug dependence of the morphine type, and may be abused. Dependence and tolerance may develop upon repeated administration. Prescribe and administer with the same degree of caution appropriate to the use of other oral narcotic medications. Subject to the Federal Controlled Substances Act (Schedule III).
Precautions: *Head injury and increased intracranial pressure:* The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a preexisting increase in intracranial pressure. Narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.
Acute abdominal conditions: Codeine or other narcotics may obscure the diagnosis or clinical course in patients with acute abdominal conditions.
Special risk patients: Administer with caution to certain patients such as the elderly or debilitated, and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, and prostatic hypertrophy or urethral stricture.
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The use of MAO inhibitors or tricyclic antidepressants with codeine preparations may increase the effect of either the antidepressant or codeine.
The concurrent use of anticholinergics with codeine may produce paralytic ileus.
Usage in Pregnancy: Safe use in pregnancy has not been established relative to possible adverse effects on fetal development. Therefore, acetaminophen and codeine should not be used in pregnant women unless, in the judgment of the physician, the potential benefits outweigh the possible hazards.
Nursing Mothers: It is not known whether the components of this drug are excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when acetaminophen and codeine are administered to a nursing woman.
Adverse Reactions: Most frequently: Lightheadedness, dizziness, sedation, shortness of breath, nausea and vomiting. More prominent in ambulatory than in nonambulatory patients, and some of these adverse reactions may be alleviated if the patient lies down. Others: Euphoria, dysphoria, constipation and pruritus.
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- Diabetes mellitus, new pathology of eyes, nerves, kidney, etc.
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- Drug-induced hemolysis
- EEG and ECG and other new instrumentation correlations achieved at autopsy
- Endocardial sclerosis — erythroblastosis fetalis — foetal hydrops
- Gall bladder dyes nephropathy
- Genetic disease syndromes (phenylketonurea, Tay-Sachs, etc.)
- Histoplasmosis, generalized, moniliasis (steroid and antibiotic-induced)
- Hamman-Rich syndrome
- Hormone secreting tumors — bronchogenic and ACTH; adenocarcinoma of the kidney with hemapoietin; fibromas and fibrosarcomas with hypoglycemia
- Hemorrhagic enteropathy in shock
- Hyaline membrane disease
- Hemorrhagic enteropathy (Qualheim-Wilson)
- Immunity deficiency diseases and systemic infections (fungus, cytomegalovirus, etc.)
- Kernicterus
- Kwashiorkor
- Kimmelstiel-Wilson lesion
- Lipid storage disease
- Modern surgery of heart disease for both congenital and acquired lesions
- Mallory-Weiss syndrome
- Multiglandular endocrine syndromes, e.g., Zollinger-Ellison syndrome
- Necrotizing papillitis associated with phenacetin
- Neonatal giant-cell hepatitis
- Oxygen poisoning
- Phenylketonuria
- Pneumocystic and plasma-cel pneumonia
- Protein-losing colloid cancer
- Pulmonary alveolar proteinosis
- Primary myocardiopathy
- Pyramidon and sulfonamide agranulocytosis (also other drugs)
- Renal parenchymal maldevelopment of polycystic disease
- Renal vein thrombosis syndrome (nephrosis)
- Respiratory distress syndrome ("hyaline membrane disease")

(continued on page 884)

Abstracts

Choi YJ, Reiner L: Autoimmune response following vasectomy. ***New York State J Med 1983;*** 83:819.

Ten men were studied for autoimmune responses following vasectomy. During a period of up to 24 months, lymphocytotoxic antibodies against panels of normal lymphocytes developed in six men and against a panel of leukemic cells in seven. A few developed marked increases of antinuclear and antismooth muscle antibodies. Degenerative changes of the seminiferous tubules were noted in two of four men in whom both prevasectomy and postvasectomy testicular biopsies were obtained. Since the immunologic and morphologic changes were observed only in a portion of those who were vasectomized, and since the reactions varied in incidence and intensity among the subjects, it is suggested that immune response genes may be operative in the postvasectomy responses. The postvasectomy findings in a series of 193 SW and NZB mice were comparable to those in men.

Emeson EE: The lymph node: an importance site of Antigen-induced recruitment of circulating lymphocytes. ***New York State J Med 1983;*** 83:823.

There are marked increases in lymphocyte traffic through lymph nodes draining the sites of antigen deposition. To further study this phenomenon, a dual-antigen, dual-isotope assay was used to monitor the alterations in lymphocyte traffic through lymph nodes draining the sites of deposition of xenogeneic or allogeneic antigens. In both the xenogeneic and allogeneic models, labeled lymphocytes with specific reactivity to two distinct, relatively non-cross-reacting antigens were used so that the lymphocytes with specific reactivity to one antigen could serve as a simultaneous control for the lymphocytes with specific reactivity to the other. One population was selectively labeled with ^{3}H and the other with ^{14}C, which allowed determination of the presence of each population in draining lymph nodes by liquid scintillation spectrometry. These labeled marker cells were then adoptively transferred to groups of syngeneic mice challenged six hours previously with either xenoantigens or alloantigens. In one group of experiments, the mice were challenged intratracheally, and in another they were challenged in the paws. After 48 hours, the mice were sacrificed, and their draining nodes were analyzed radiochemically. The results indicated that (1) there were marked increases in the retention of circulating lymphoblasts in the lymph nodes draining both the paws and lungs challenged with either xenoantigens or alloantigens, and (2) there was some preferential retention in these lymph nodes of lymphocytes with specific reactivity to the antigen used for immunization.

Hyman A, Podolsky A, Factor SM: Focal adrenal necrosis and fibrosis. ***New York State J Med 1983;*** 83:829.

Focal adrenal pathology was studied in a retrospective analysis of 341 autopsies. We identified three lesions: 5 cases of acute focal cortical infarction; 21 cases of focal cytolytic necrosis; and 19 cases of focal cortical fibrosis. The incidence of abnormalities was 12%, which represents a twenty-fold increase over the largest previously reported series. Possible reasons for this increase are discussed.

Novikoff AB: Cytochemical studies on cell organelles. ***New York State J Med 1983;*** 83:835.

Dr. Angrist encouraged me to use cytochemical techniques to study cell organelles during pathologic change. He also suggested that other members of the department might want to learn these procedures in my laboratory. These organelles included the plasma membrane, mitochondria, lysosomes, "GERL", endoplasmic reticulum, the Golgi apparatus, peroxisomes, and microperoxisomes.

Oka M, Onur N, Gross S: Mitral anulus and valvular calcification. ***New York State J Med 1983;*** 83:837.

A total of 54 cases of mitral annulus calcification with or without associated valve calcification in autopsy material and 24 cases of surgically removed valves were studied to analyze the nature and characteristics of calcification. One group of 37 cases without any clinical history of previous infectious endocarditis and another group of 17 cases with clinically suspicious or proved previous infectious endocarditis were included. The surgically removed valves included active, healing infectious endocarditis and non-infectious atherosclerotic calcification.

Histologically, the first group of cases can be divided into the following categories: A mass of calcification with well-demarcated border which is surrounded by altered collagen or fibrous tissue. This group of calcification is considered as true degenerative calcification as previous investigators have concluded. In the second category, the calcification is made up of a multiple irregularly sized and irregularly shaped calcium deposits which are surrounded by an inflammatory cell reaction and capillary type of vascularization. This type of calcification usually contains a small focus of degenerative calcification as a core of the massive calcification in the mitral annulus fibrosus, and is more often encountered in valvular calcification. The third category is the mixture of the first and second categories.

The results of this study conclude that mitral annulus calcification is not merely an age-related degeneration, but superimposed infectious factors contribute to the acceleration and extension of the calcification. The complication of mitral annulus and valvular calcification and its implications in open heart surgery are discussed.

Shin W-Y: Characteristic ultrastructural features of some tumors in humans. ***New York State J Med 1983;*** 83:843.

During the past two decades, considerable information has been accumulated in the field of electron microscopy as it applies to human tumors and ultrastructural pathology in general. Ultrastructural analysis can often help distinguish one tumor from the other quite accurately when light microscopic diagnosis is uncertain. In some tumors, as will be described, characteristic ultrastructural features enable pathologists to determine an unequivocal cell type.

The purpose of this communication is to emphasize the usefulness of this important diagnostic tool in the field of tumor diagnosis.

Smith FB: Role of the pulmonary surfactant system in lung diseases of adults. ***New York State J Med 1983;*** 83:851.

The most important clinical disease entity involving the pulmonary surfactant system is the respiratory distress syndrome of newborn infants. In this brief review, evidence is considered regarding the role of the surfactant system in lung diseases of adults. Information on this point is limited, in large part reflecting the difficulty of evaluating the surfactant system in living patients. Changes in surfactant probably mediate certain manifestations of pulmonary thromboembolism, and response of the surfactant system appears to be one factor determining the outcome of acute alveolar injury states, such as "shock lung". Increased activity of the surfactant system appears to serve an adaptive function in many forms of lung disease. There is relatively little support for the notion that overproduction of surfactant is a primary cause of some lung diseases.

Hutton L, Yang SS, Bernstein J: Placenta accreta: a 26-year clinicopathologic review (1956–1981). ***New York State J Med 1983;*** 83:857.

Clinicopathologic study of 28 patients with placenta accreta, from a single large community hospital, confirmed the previous observation that the failure of placental separation was due to deficiency or absence of decidua basalis. The incidence in this series was 1 in 3,570 deliveries. Older age with high gravidity was the usual clinical background. The majority of patients (64%) had previous curettage and or cesarean section. The study further confirmed that placental tissue removed manually or by curettage could be examined for evidence of placenta accreta when clinically there was abnormal placental adherence or retention with postpartum hemorrhage. Examination of 50 control placentas showed layers of compact and spongiotic decidua basalis; none had myometrial tissue adherent to the maternal surface.

Dua NK, Montana J, Sirkin B, Singh J: Aspiration cytology of the breast: an analysis of 865 cases. ***New York State J Med 1983;*** 83:867.

A five-year experience with aspiration cytology of breast tumors and their histological correlation, in a medium sized community hospital, is discussed. A close working relationship with the surgical staff is emphasized. The cytological patterns seen in benign diseases, particularly fibroadenomas, are discussed and elaborated.

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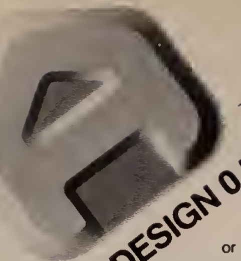

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Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined

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(continued from page 881)

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Breaking the postmortem barrier. ***Bulletin of the New York Academy of Medicine*** **1968; 44:840.** ■

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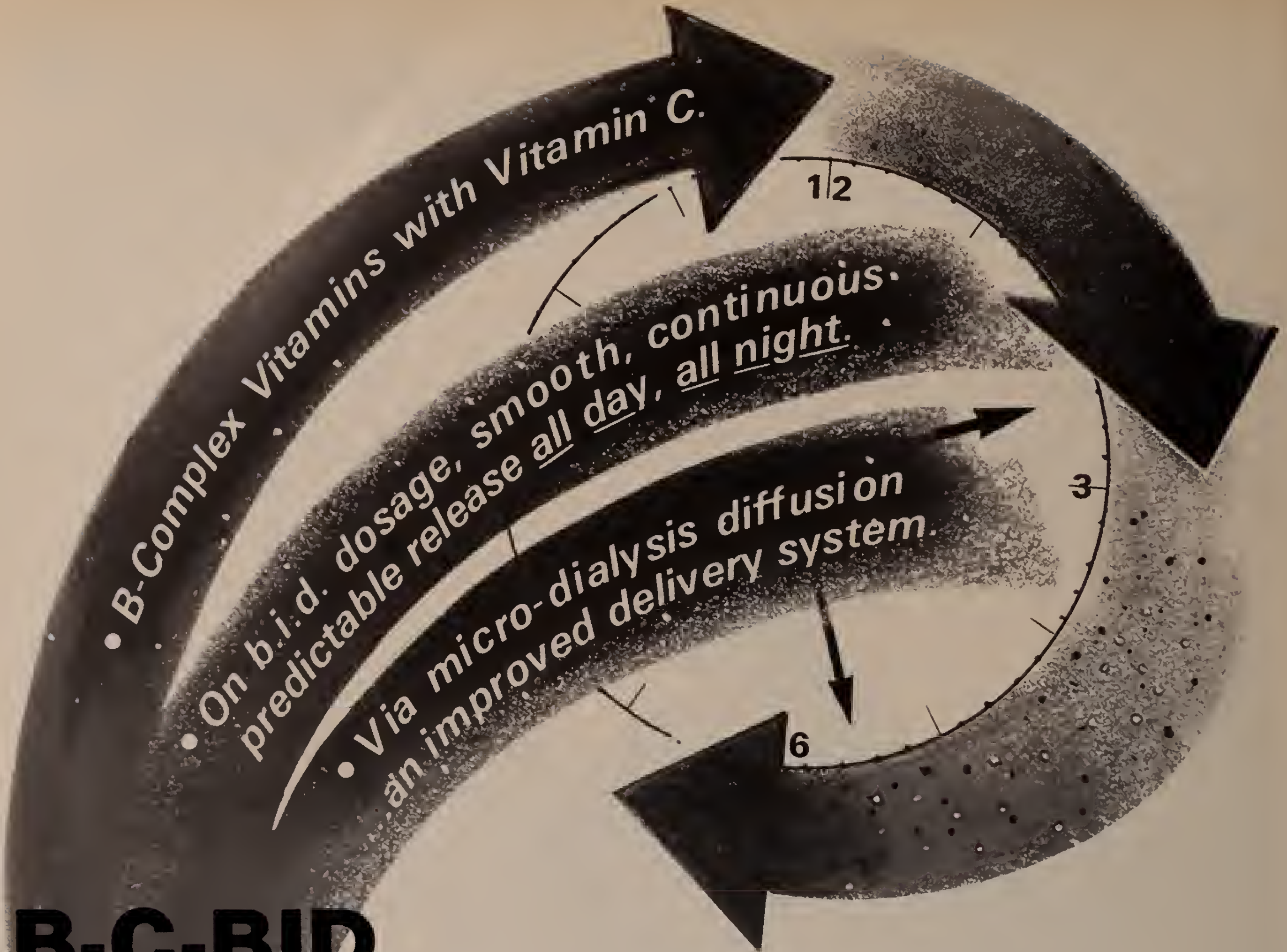
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MEDICAL DIRECTORY OF NEW YORK STATE. A biennial listing of over 35,000 physicians licensed in New York State indicating their office addresses, specialty boards and colleges and official hospital staff appointments; as well as the staff lists of hospitals throughout the state.

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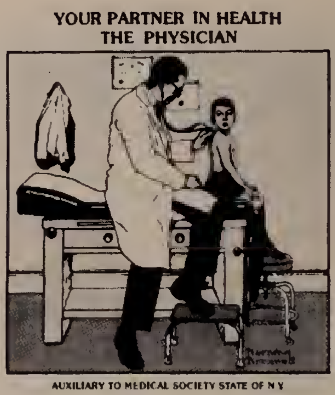

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what goes on IN CONTINUING MEDICAL EDUCATION

NEW YORK STATE **JUNE 1983**

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Please send information to the Editor, WHAT GOES ON,
420 Lakeville Road, Lake Success, New York 11042
Telephone 516-488-6100.

Compiled by the Division of Scientific Activities
George J. Lawrence, Jr., M.D., Director
Mrs. Tina Koty, Editor
Philip Keating, Director, Division of Finance

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NEW YORK

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June 13–17, 1983
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June 20–23, 1983
6TH ANNUAL REVIEW OF SELECTED TOPICS IN PEDIATRIC AND ADOLESCENT MEDICINE
FEE: $395 CREDIT: AMA Cat. 1 (22 Hrs.)
* Schwartz Lecture Hall, 401 E. 30th St., NYC
June 20–23, 1983—8:30 a.m.–2:00 p.m.
COURSE #475—SELECTED TOPICS IN PEDIATRIC AND ADOLESCENT MEDICINE 1983
CREDIT: Cat. 1 (22 Hrs.)
For further information contact NYU Medical Center. Tel: 212/340-5295.

Department of Otolaryngology
June 4–5, 1983
EASTERN SECTION SOFT TISSUE SURGERY WORKSHOP AMERICAN ACADEMY OF FACIAL PLASTIC AND RECONSTRUCTIVE SURGERY
Noel L. Cohen, M.D., Joseph B. Jacobs, M.D.
FEE: $275
For further information contact Noel L. Cohen, M.D., Dept. of Otolaryngology, NYU Medical Ctr. Tel: 212/340-6521.

Institute of Environmental Medicine
June 7–8, 1983
SEMINAR ON OCCUPATIONAL RISK FACTORS IN CARDIOVASCULAR DISEASE
FEE: $100 ($25 for Students)
For further information contact Prof. Arthur C. Upton, M.D., Institute of Environmental Medicine, Tel: 212/340-5280.
June 3–5, 1983
INTERVENTIONAL RADIOLOGY & DIGITAL IMAGING
June 20–24, 1983
RADIATION PHYSICS AND BIOLOGY
June 25–26, 1983
THE RIGHTS OF MENTAL PATIENTS: A PRACTICUM IN PSYCHIATRY AND THE CIVIL LAW
June 27–30, 1983
FORENSIC SCIENCES SYMPOSIUM FOR MEDICAL EXAMINERS, CORONERS, ATTORNEYS AND LAW ENFORCEMENT PERSONNEL
For further information contact NYU Post-Graduate Medical School. Tel: 212/340-5295.

Doctors Hospital

170 East End Avenue
New York, NY 10028

June 2, 1983—Thursday—4:15 p.m.
CARDIOVASCULAR DISEASES IN CLINICAL PRACTICE EVALUATION OF CARDIAC PATIENTS FOR GENERAL SURGERY
Ralph M. Sussman, M.D.
CREDIT: AMA Cat. 1 (1-1/2 Hrs.)
For further information contact the Secretary of CME, Doctors Hospital. Tel: 212/870-9118.

Albert Einstein College Of Medicine of Yeshiva University—Dept. of Surgery

1300 Morris Park Avenue, Bronx 10461
* Van Etten Hospital—Room 523

June 3, 1983—4:00–5:30 p.m.
ONCOLOGY FOR THE FAMILY PRACTITIONER ANEMIAS
Dr. B. H. Kaplan
June 17, 1983—4:00–5:30 p.m.
CHEST X-RAY: BENIGN AND MALIGNANT LESIONS
Dr. M. Zelefsky
CREDIT: AAFP Cat. 1
For further information contact Margot L. Wulf, Albert Einstein College of Medicine. Tel: 212/430-2000.

St. Luke's-Roosevelt Hospital Center Smithers Alcoholism Treatment & Training Center

428 W. 59th Street, NY 10019

June 6–10, 1983
CLINICAL DECISION MAKING IN ALCOHOLISM & DRUG ABUSE
For further information contact Andrew J. Gordon, Ph.D. Tel: 212/554-6725.

The New York Group for Geriatric Psychiatry & The Section on Geriatric Medicine of the New York Academy of Medicine

40 East 89th Street, New York, NY 10028

June 8, 1983—Wednesday—8:15 p.m.
THIRD ALVIN I. GOLDFARB MEMORIAL LECTURE "ALZHEIMER'S DISEASE: AN UPDATE"
Dr. Robert Katzman
For further information contact William J. Gershell, M.D. Tel: 212/534-2400.

The Page and William Black Postgraduate School of the Mount Sinai School of Medicine (CUNY)

One Gustave L. Levy, New York, NY 10029

June 3, 1983—Friday—9:00 a.m.–5:00 p.m.
THE PATHOGENESIS DIAGNOSIS AND TREATMENT OF PANCREATIC INFLAMMATION
David A. Dreiling, M.D.
Fee: $150; $75—Residents & Fellow
CREDIT: AMA Cat. 1 (6.5 Hrs.)
June 10, 11, 1983—9:00 a.m.–3:00 p.m.—(Fri)
9:00 a.m.–1:00 p.m.—(Sat)
THE BIOLOGICAL BASIS OF PSYCHOTHERAPEUTICS
Kenneth L. Davis, M.D.
FEE: $250 CREDIT: AMA Cat. 1 (10.5 Hrs.)
June 12–16, 1983—9:00 a.m.–6:00 p.m.
RHINOPLASTY AND OTOPLASTY
Sidney S. Feuerstein, M.D.
FEE: $600 CREDIT: AMA Cat. 1 (40 Hrs.)
June 17, 18, 1983—9:00 a.m.–6:00 p.m. (each day)
FACE LIFT SURGERY
William Lawson, M.D., D.D.S.

FEE: $300 CREDIT: AMA Cat. 1 (15 Hrs.)
June 20, 21, 1983—9:00 a.m.-5:00 p.m. (each day)
COSMETIC SURGERY OF THE AGING EYE
Morris Feldstein, M.D.
FEE: $300 CREDIT: AMA Cat. 1 (13 Hrs.)

The New York Hospital-Cornell Medical Center

525 East 68th Street, NY 10021
June 6, 8, 9, 10, 11, 1983
UPDATE YOUR MEDICINE 1983
Dr. Lila Wallis & Dr. Stephen Scheidt
CREDIT: AMA Cat. 1
For further information contact Office of CME, Cornell Medical Center. Tel: 212/472-5600.

The Ophthalmological Foundation of America, Inc.

823 United Nations Plaza, New York 10017
June 16-18, 1983—Begins Thursday at 5:00 p.m.
SURGICAL COURSES IN LENS IMPLANTATION
Miles A. Galin, M.D.
For further information contact Mrs. Ruth Green. Tel: 212/470-2114.

QUEENS

Long Island Jewish-Hillside Medical Center/ Queens Hospital Center Affiliation, Department of Medicine, New Hyde Park, N.Y.

• Nursing School Auditorium—Queens Hospital Center
82-68 164th Street, Jamaica, N.Y.
June 1, 1983—Wednesday—11:00 a.m.-12:00 Noon
EXERCISE IN THE POST-MYOCARDIAL INFARCTION PATIENT
Ira Weg, M.D.
June 8, 1983—Wednesday—11:00 a.m.-12:00 Noon
MANAGEMENT OF PREGNANCY IN SYSTEMIC LUPUS
Michael Lockshin, M.D.
For further information contact Herbert Diamond, M.D., Dept. of Medicine, LIJ, New Hyde Park, N.Y.
Department of Psychiatry
• School of Nursing, Queens Hospital Center
June 3, 1983—Friday—11:00 a.m.-12:00 Noon
RECOGNIZING SUICIDE RISKS
Herbert Waltzer, M.D.
June 10, 1983—11:00 a.m.-12:00 Noon
PSYCHIATRISTS IN RESTRAINTS: "NO BEDS"
William Barnard, M.D.
June 17, 1983—11:00 a.m.-12:00 Noon
FATE OF THE MENTALLY RETARDED PATIENT IN A PSYCHIATRIC EMERGENCY SERVICE
Philip Levine, M.D.
CREDIT:AMA Cat. 1
For further information contact Philip E. Levine, M.D., 212/990-3551.

The Jamaica Hospital

89th Avenue & Van Wyck Expressway
Jamaica, NY 11418
• Community Room
June 9, 1983—8:30-9:30 a.m.
CARDIOLOGY—THE EFFECTS OF ALCOHOL ON THE CARDIOVASCULAR SYSTEM
Howard Friedman, M.D.
• Trump Pavilion
June 8, 1983—9:00-10:30 a.m.
ENDOCRINOLOGY
HYPERTHYROIDISM & THYROID NODULES
Howard D. Kolodny, M.D.
• Community Room
June 3, 1983—8:30-9:30 a.m.
MEDICAL GASTROENTEROLOGY UPDATE ON HEPATITIS
Sushil K. Sharma, M.D.
June 17, 1983—8:30-9:30 a.m.
RECOGNITION AND MANAGEMENT OF DTs AND HEPATIC ENCEPHALOPATHY
William J. Conway, M.D.
• Trump Pavilion
June 15, 1983—9:00-10:30 a.m.
RECENT ADVANCES IN GASTROENTEROLOGICAL ENDOSCOPY
Jerome Waye, M.D.
• Community Room
June 7, 1983—8:30-9:30 a.m.
HEMATOLOGY—HEMOGLOBINOPATHIES
Basil Tatsis, M.D.
June 2, 1983—8:30-9:30 a.m.
INFECTIOUS DISEASES—NEW ANTIBIOTICS
Robert H. Lapin, M.D.
• Trump Pavilion
June 1, 1983—9:00-10:30 a.m.
MEDICAL GRAND ROUNDS & PROGRESS IN MEDICINE
MANAGEMENT OF PSYCHOTROPIC AGENTS
Jack Schnee, M.D.
• Assembly Room
June 3, 1983—12:30 p.m.
NEPHROLOGY
RENAL SONOGRAPHY PRESENT STATUS
Richard Schaffer, M.D.
• Community Room
June 14, 1983—8:30-9:30 a.m.
NEUROLOGY—VIRAL INFECTIONS OF CNS
Caroline Britton, M.D.
June 10, 1983—8:30-9:30 a.m.
ONCOLOGY—KAPOSI'S SARCOMA
Bijan Safai, M.D.
• Assembly Room
June 17, 1983—12:30-1:30 p.m.
PATHOLOGY GRAND ROUNDS
COMPLEMENT AND INFLAMMATION
Adolfo B. Firpo, M.D.
June 6, 1983—12:30-1:30 p.m.
OTOLARYNGOLOGY
EAR & LEARNING PROBLEMS—ROLE OF AUDIOMETRIC TESTS
Ali Agarabi, M.D.
June 13, 1983—12:30-1:30 p.m.
ALLERGIC RHINITIS & SINUSITIS
Ali Agarabi, M.D.
• Community Room
June 16, 1983—8:30-9:30 a.m.
RHEUMATOLOGY
CRITIQUE OF RHEUMATOLOGY LECTURE SERIES
William A. O'Connell, M.D.
For further information contact The Jamaica Hospital. Tel: 212/657-1800.

Flushing Hospital and Medical Center Department of Medicine

4500 Parsons Blvd., Flushing, NY 11355
June 7, 1983—10:00 a.m.-12:00 Noon
PHARMACO-THERAPEUTICS SYMPOSIA
GRAND ROUNDS—PSYCHOTROPIC DRUG THERAPY: AN OVERVIEW OF OLD AND NEW DRUGS
Alan Gellenberg, M.D.
June 14, 1983—10:00 a.m.-12:00 Noon
GRAND ROUNDS—CARDIOVASCULAR DRUGS: WHAT'S NEW? UPDATE ON BRONCHODILATOR THERAPY
June 21, 1983—10:00 a.m.-12:00 Noon
GRAND ROUNDS—ANTI-MICROBIAL THERAPY: NEWER

ASPECTS
ANTI-INFLAMMATORY DRUGS
June 28, 1983—10:00 a.m.–12:00 Noon
GRAND ROUNDS—ANTI-PLATELET DRUGS & ANTI-COAGULANTS: NEW RATIONALE AND USE
GASTRO-INTESTINAL AGENTS: NEW MODALITIES OF TREATMENT
Simmy Bank, M.D.
CREDIT: AMA Cat. 1
For further information contact Louisa T. Gonzalez, Flushing Hospital & Medical Ctr. Tel: 212/670-5741.

NASSAU

The Page & William Black Postgraduate School of Medicine of the Mount Sinai School of Medicine (CUNY)

One Gustave L. Levy Place, New York 10029
* Franklin General Hospital, Valley Stream, NY
June 15, 1983—1:00-5:00 p.m.
NEWER ANTIMICROBIALS
Drs. Hirschman, Hammer, Sacks
CREDIT: AMA Cat. 1 (16 Hrs.)

Nassau County Medical Center
Department of Medicine

2201 Hemstead Turnpike
East Meadow, NY 11554
June 2, 1983—10:00 a.m.
SELECTIVE ASPECTS OF INFECTIONS IN THE ELDERLY
Richard Gleckman, M.D.
June 9, 1983—10:00 a.m.
ELECTROPHYSIOLOGY OF DIAL CHAMBER
Seymour Furman, M.D.
CREDIT: AMA Cat. 1 & AAFP
For further information contact Ethel A. Ford, Nassau County Medical Center. Tel: 516/542-0123.

SUFFOLK

Brookhaven Memorial Hospital Medical Center

101 Hospital Road
Patchogue, NY 11772
* 1st Floor Conference Room
June 7, 1983—8:00 a.m.–9:00 a.m.
PEDIATRIC CONFERENCES
NEW MODALITIES IN ALLERGY THERAPY
Ray Dattyler, M.D.
June 3, 1983—8:00 a.m.–9:00 a.m.
CLINICAL PROBLEMS IN FAMILY MEDICINE
PSYCHOSOCIAL DISORDERS
MANAGEMENT OF THE DISRUPTIVE PT. IN THE HOSPITAL
Charles O'Brien, M.D.
June 10, 1983—8:00 a.m.–9:00 a.m.
MEDICAL ASPECTS OF DRUG ADDICTION
Alfred Howe, M.D.
June 17, 1983—8:00 a.m.–9:00 a.m.
THE AFFECTIVE DISORDERS
Morton Miller, M.D.
June 24, 1983—8:00 a.m.–9:00 a.m.
NEW DEVELOPMENTS IN SEX THERAPY
Joseph LoPiccolo, Ph.D.
CREDIT: AMA Cat. 1
For further information contact Dorothy S. Lane, M.D. Tel: 516/654-7795.

WESTCHESTER

Westchester County Medical Center

Valhalla, New York 10595
* Cancer Screening Center, Room 1013 in the Macy Pavilion
June/July
"I CAN COPE"
For further information contact Cindy Mugharbil at 914/347-3260.

New York Medical College

Munger Pavilion
Valhalla, NY 10595
June 20 to July 1, 1983
THE EPIDEMIOLOGY INSTITUTE
For further information contact Jos. A. Cimino, M.D., N.Y. Medical College. Tel: 914/347-5879.

DUTCHESS COUNTY

Harlem Valley Psychiatric Center
New York Medical College

Wingdale, NY 12594
June 3, 1983—Friday—10:00-11:30 a.m.
THE BORDERLINE DISORDERS
Samuel J. Langer, M.D.
June 10, 1983—Friday—10:00-11:30 a.m.
CHILD DEVELOPMENT & TREATMENT APPROACHES
Bertrand New, M.D.
June 17, 1983—Friday—10:00-11:30 a.m.
FRONTIERS OF PSYCHIATRIC RESEARCH
Jay Novins, M.D.
For further information contact Beth H. Davies, R.N., M.S., Harlem Valley Psychiatric Center. Tel: 914/832-6611.

POUGHKEEPSIE

The Hastings Center

360 Broadway
Hastings-on-Hudson, NY 10706
* Vassar College, Poughkeepsie, NY
June 19-24, 1983
WORKSHOP ON ETHICAL ISSUES IN THE HEALTH PROFESSIONS AND THE BIOMEDICAL SCIENCES
FEE: $300 CREDIT: AMA Cat. 1 (40 Hrs.)
For further information contact The Hastings Center. Tel: 914/478-0500.

ROCHESTER

The University of Rochester Medical Center Sponsored by the Univ. of Rochester School of Medicine & Dentistry

Box 677, 601 Elmwood Avenue
Rochester, NY 14642
* Genesee Plaza Holiday Inn, Rochester
June 2 & 3, 1983
OB/GYN FOR THE FAMILY PHYSICIAN
FEE: $170 CREDIT: CME (13 Hrs.)
For further information contact Office of Continuing Professional Education. Tel: 716/275-4392.

Rochester Eye Institute, Inc.

Suite #30—1561 Long Pond Road
Rochester, NY 14626
• Genesee Plaza/Holiday Inn, Rochester, N.Y.
June 9 & 10, 1983
EIGHTH ANNUAL OPHTHALMIC SEMINAR
For further information contact Miss Catherine Sgabellone, Rochester Eye Institute. Tel: 716/227-4981.

SYRACUSE

SUNY—Upstate Medical Center

766 Irving Ave., Syracuse 13210
• Weiskotten Hall
June 1, 1983
POST GRADUATE EDUCATION DAY: PEDIATRICS "CONVERSATIONS WITH VINCENT A. FULGINITI AND ROBERT L. BRENT"
Frank A. Oski, M.D.
FEE: $65 CREDIT: CME Cat. 1 (7 Hrs.)
• Marriott Inn, Syracuse, NY
June 2–3, 1983
UPSTATE MEDICAL CENTER 33RD ANNUAL MEETING: OTOLARYNGOLOGY
Richard R. Gacek, M.D.
For further information contact Office of CME, Program Coordinator. Tel: 315/473-4606.

ST. LAWRENCE COUNTY

Canton-Potsdam Hospital

50 LeRoy Street
Potsdam, NY 13676
• Medical Library
June 9, 1983—9:00 a.m.
SELECTED TOPICS IN PEDIATRICS, PEDIATRIC CARDIOLOGY, AND PEDIATRIC GASTROENTEROLOGY
Judith Sondheimer, M.D., Henry M. Sondheimer, M.D.
For further information contact Sebastian A. Mazzotta, M.D., Canton-Potsdam Hospital. Tel: 315/265-3300.

BUFFALO

Roswell Park Memorial Institute Dept. of Health—State of New York

666 Elm Street, Buffalo, NY 14263
June 16, 1983—Thursday
ONCOLOGY SEMINAR SERIES
DISCIPLINARY APPROACH TO ADOLESCENT ONCOLOGY
Dr. Cameron Tebbi
FEE: $45 CREDIT: AMA Cat. 1 & AAFP
For further information contact Gayle Bersani, R.N. Tel: 716/845-4406.

The New York State Society of Anesthesiologists, Inc.

30 East 42nd Street—Suite 1501
New York, NY 1501
• Buffalo General Hospital, Buffalo, N.Y.
June 20–22, 1983
UPDATE ON ANESTHESIOLOGY AND THE CARDIOVASCULAR PATIENT
CREDIT: CME Cat. 1 (4 Hrs.)
For further information contact Kurt G. Becker, Exec. Dir. Tel: 212/867-7140.

OUT OF STATE

American Society of Clinical Pathologists

2100 West Harrison Street
Chicago, IL 60612
• Boston, Mass.
June 18–19, 1983
WEEKEND OF PATHOLOGY
For further information contact the Amer. Society of Clinical Pathologists, at above address or call Toll Free 800-621-4142.

Albert Einstein College of Medicine of Yeshiva University

1300 Morris Park Avenue, Bronx, NY 10461
• Massachusetts
June 27–July 1, 1983
CLINICAL NEUROLOGY FOR PSYCHOTHERAPISTS
Dr. David Kaufman
For further information contact the Office of Continuing Education, Tel: 212/920-6676.

The American Academy of Allergy & Immunology Sponsored by Pennsylvania Allergy Society

611 East Wells Street, Milwaukee, WI 53202
• Hershey Hotel, Hershey, Pa.
June 24–26, 1983
ANNUAL MEETING OF THE PENNSYLVANIA ALLERGY SOCIETY
For further information contact Mr. Rick Blair, Hershey Medical Center, 500 University Dr., Hershey, PA 17033. Tel: 717/534-6483.

State University of New York at Buffalo Sponsored by The Dept. of Pediatrics, Children's Hospital of Buffalo and CME, Co-sponsored by The Hospital for Sick Children, Toronto, Canada

219 Bryant Street, Buffalo, NY 14222
• The Sheraton Brock Hotel, Niagara Falls, Canada
June 15–17, 1983
THE 1ST INTERNATIONAL CONFERENCE ON ADVANCES IN CHILD NEUROLOGY
Michael Cohen, M.D., William Logan, M.D.
FEE: $275 CREDIT: AMA Cat. 1 (20 Hrs.)
For further information contact Rayna Dutton, Children's Hospital of Buffalo. Tel: 716/878/7630/7640.

American Society of Law & Medicine

765 Commonwealth Avenue
Boston, MA 02215
• Washington, D.C.
June 2–3, 1983
SPRING 1983 EDUCATIONAL CONFERENCES
LEGAL AND ETHICAL ASPECTS OF HEALTH CARE FOR THE ELDERLY
• Chicago, Ill.
June 9–10, 1983
NEW DEVELOPMENTS IN MENTAL HEALTH LAW
• Cambridge, Mass.
June 20–22, 1983
TRAUMA CENTERS AND EMERGENCY MEDICINE
For further information contact Victoria Coates at Amer. Society of Law & Medicine.

Doppler Echo Course Sponsored by H.E.L.P.

P.O. Box 13689
Tucson, Arizona 85732
• Netherlands Congress Center, The Hague, Netherlands
June 19–21, 1983
DOPPLER CARDIOLOGY COURSE
For further information contact Dr. Goldberg, Box 13689, Tucson, AZ 85732. Tel: 602/626-7482.

American Society of Clinical Pathologists

2100 West Harrison Street
Chicago, IL 60612
• Buena Vista Palace, Lake Buena Vista, Fla.
June 6–10, 1983
NON-GYNECOLOGIC CYTOPATHOLOGY
CREDIT: CME (35 Hrs.)
• Town & Country Hotel, San Diego, Calif.
June 6–10, 1983
CLINICAL IMMUNOLOGY & IMMUNOPATHOLOGY: CURRENT CONCEPTS & NEW DEVELOPMENTS
CREDIT: CME (29.5 Hrs.)
• Buena Vista Palace
June 13–17, 1983
MORPHOLOGIC HEMATOPATHOLOGY
CREDIT: CME (27 Hrs.)
• ASCP Educational Center, 2100 West Harrison St.
June 13–17, 1983
DEATH INVESTIGATION
CREDIT: CME (30 Hrs.)
• Holiday Inn, Williamsburg, Va.
June 13–17, 1983
REVIEW IN CLINICAL CHEMISTRY
CREDIT: CME (35 Hrs.)
• Shoreham Hotel, Washington, D.C.
June 20–24, 1983
SURGICAL PATHOLOGY OF THE GASTROINTESTINAL TRACT
CREDIT: CME (26.5 Hrs.)
For further information contact Barb Agustin, Amer. Society of Clinical Pathologists. Tel: 312/738-1336.

Medical Care Development

11 Parkwood Drive
Augusta, Maine 04330
• Black Point Inn, Prout's Neck, Maine
June 26–29, 1983
PRIMARY CARE MANAGEMENT OF THE GERIATRIC PATIENT
CREDIT: AMA Cat. 1
For further information contact Gerald Goold or Joanne Adams, Tel: 207/622-7566.

Towsley Center for Continuing Medical Education Dept. of Postgraduate Medicine Tosley Center, University of Michigan

Ann Arbor, MI 48109
• Fairmont Hotel, Denver Colorado
June 23–24, 1983
DEVELOPING, MARKETING, AND MANAGING CONFERENCES: MAKING IT IN TOUGH TIMES
CREDIT: CME Cat. 1
For further information contact Towsley Center, Univ. of Michigan. Tel: 313/763/1400.

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6900 Grove Road, Thorofare, NJ 08086
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THIRD ANNUAL ADVANCES IN GASTROENTEROLOGY
CREDIT: CME Cat. 1
For further information contact Charles B. Slack, Inc. Tel: 609/848-1000.

University of Delaware sponsored by The Thomas Jefferson Medical College

2800 Pennsylvania Avenue
Wilmington, Delaware 19806
• Rehoboth Beach, Del.
June 19–24, 1983
EASTERN SHORE MEDICAL SYMPOSIUM
FEE: $395
For further information contact Sylvia Brocka, Univ. of Delaware, Division of CME. Tel: 302/738-8151.

The New York Academy of Sciences

2 East 63rd St., New York, NY 10021
• Palazzo Dei Congress, Florence, Italy
June 17 & 18, 1983
CLINICAL ASPECTS OF LIFE-THREATENING ARRHYTHMIAS
For further information contact Conference Director, The N.Y. Academy of Sciences.

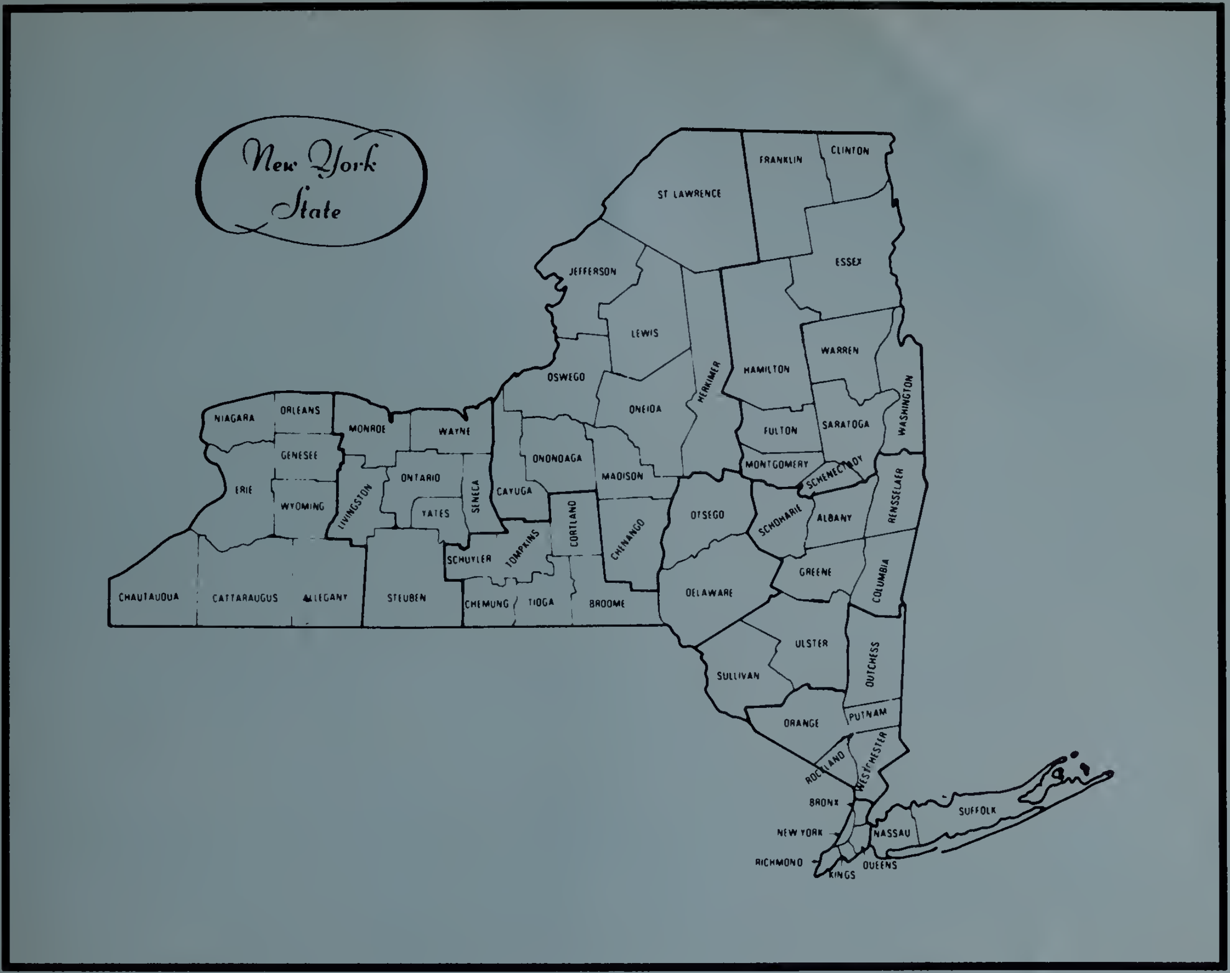
FUTURE EVENTS

The American Academy of Allergy & Immunology Sponsored by Colorado Allergy Society

611 East Wells Street, Milwaukee, WI 53202
• Given Institute, Aspen, Colo.
July 28–30, 1983
1ST ANNUAL ASPEN ALLERGY CONFERENCE "DIAGNOSTIC TECHNIQUES IN ALLERGY"
For further information contact Dr. Henry Claman, University of Colorado Health Science Center, Box B-164, Denver, CO 80262.

Association for the Care of Asthma, Inc.

P.O. Box 568—Spring Valley Road
Ossining, NY 10562
• Hawaiian Regent Hotel, Honolulu, Hawaii
July 6–9, 1983
ASSOCIATION FOR THE CARE OF ASTHMA ANNUAL MEETING & POSTGRADUATE COURSE IN ALLERGY & IMMUNOLOGY
For further information contact Harold A. Ifft, Assoc. for the Care of Asthma. Tel: 914/762-1941.



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- Contraindicated in patients who are pregnant or hypersensitive to flurazepam.
- Caution patients about drinking alcohol, driving or operating hazardous machinery during therapy.

References: 1. Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **4.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **5.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Kales JD: *Pharmacol Physicians 4*:1-6, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*:25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

Dalmane® Ⓒ
(flurazepam HCl/Roche)

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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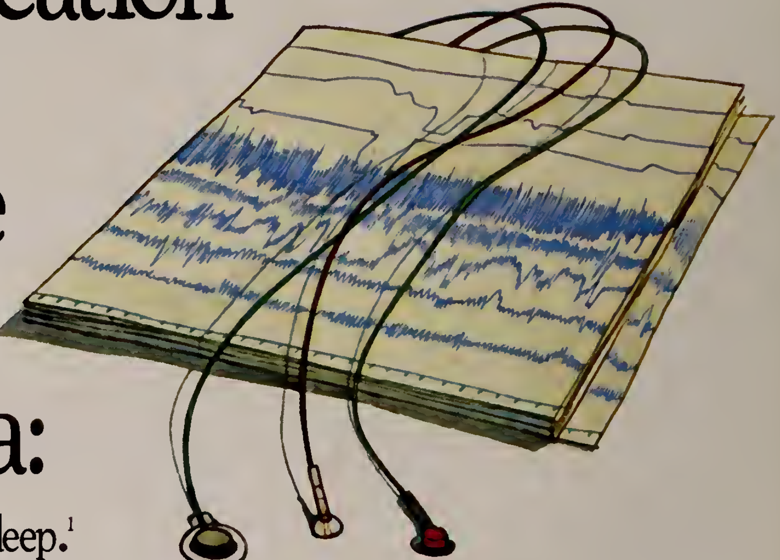

- Rapid onset of sleep.[1]
- More total sleep time on the first 3 nights of therapy.[1]
- More total sleep time on nights 12 to 14 of therapy.[1]
- Continued efficacy for at least 28 nights.[2]
- Seldom produces morning hangover.[3]
- Avoids rebound insomnia when therapy is discontinued.[1,4,5]

15-mg/30-mg capsules

Dalmane® Ⓘ
flurazepam HCl/Roche

ROCHE®
Roche Products Inc.
Manati, Puerto Rico 00701

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JUNE 1983

vol. 83 #7

Measles Eradication—Can we succeed?

(See page 948.)

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Young boy in the Republic of Mali receiving immunization with an automatic jet injector, used around the world in mass vaccination campaigns against measles and other diseases. (Photo courtesy of Pascal James Imperato, MD)

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Brief Prescribing Information

CONTRAINDICATIONS: Patients with severe hypertension, severe coronary artery disease, and in patients on MAO inhibitor therapy, narrow-angle glaucoma, urinary retention, peptic ulcer, during an asthmatic attack.

Hypersensitivity: Contraindicated in patients with hypersensitivity or idiosyncrasy to sympathomimetic amines or phenanthrene derivatives.

Nursing Mothers: Contraindicated because of the higher than usual risk for infants from sympathomimetic amines.

WARNINGS: Use judiciously and sparingly in patients with hypertension, diabetes mellitus, ischemic heart disease, increased intraocular pressure, hyperthyroidism, or prostatic hypertrophy. May produce CNS stimulation and convulsions or cardiovascular collapse with accompanying hypotension.

Use with caution in patients with increased intraocular pressure, cardiovascular disease, hypertension or in patients with a history of bronchial asthma. Do not exceed recommended dose.

Use in Elderly: The elderly (60 years and older) are more likely to have adverse reactions to sympathomimetics. Overdosage in this age group may cause hallucinations, convulsions, CNS depression and death.

PRECAUTIONS: *General:* Should be used with caution in patients with diabetes, hypertension, cardiovascular disease and hyperreactivity to ephedrine. The antihistaminic may cause drowsiness and ambulatory patients who operate machinery or motor vehicles should be cautioned accordingly.

Information for Patients: Antihistamines may impair mental and physical abilities required for the performance of potentially hazardous tasks, such as driving a vehicle or operating machinery, and mental alertness in children.

Drug Interactions: MAO inhibitors and beta adrenergic blockers increase the effect of sympathomimetics. Sympathomimetics may reduce the antihypertensive effects of methyldopa, mecamylamine, reserpine and veratrum alkaloids. Concomitant use of antihistamines with alcohol, tricyclic antidepressants, barbiturates and other CNS depressants may have an additive effect.

Pregnancy Category C: Animal reproduction studies have not been conducted with NOVAFED A capsules. It is also not known whether NOVAFED A capsules can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. NOVAFED A capsules may be given to a pregnant woman only if clearly needed.

Nursing Mothers: Pseudoephedrine is contraindicated in nursing mothers because of the higher than usual risk for infants from sympathomimetic amines.

ADVERSE REACTIONS: Hyperreactive individuals may display ephedrine-like reactions such as tachycardia, palpitations, headache, dizziness, or nausea. Patients sensitive to antihistamines may experience mild sedation. Sympathomimetic drugs have been associated with certain untoward reactions including fear, anxiety, tenseness, restlessness, tremor, weakness, pallor, respiratory difficulty, dysuria, insomnia, hallucinations, convulsions, CNS depression, arrhythmias, and cardiovascular collapse with hypotension.

Possible side effects of antihistamines are drowsiness, restlessness, dizziness, weakness, dry mouth, anorexia, nausea, headache, nervousness, blurring of vision, heartburn, dysuria and very rarely dermatitis. Patient idiosyncrasy to adrenergic agents may be manifested by insomnia, dizziness, weakness, tremor or arrhythmias.

OVERDOSAGE: Acute overdosage with NOVAFED A capsules may produce clinical signs of CNS stimulation and variable cardiovascular effects. Pressor amines should be used with great caution in the presence of pseudoephedrine. Patients with signs of stimulation should be treated conservatively.

DOSAGE AND ADMINISTRATION: One capsule every 12 hours. Do not give to children under 12 years of age.

CAUTION: Federal law prohibits dispensing without prescription.

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New York State Journal of Medicine

(ISSN 0028-7628)

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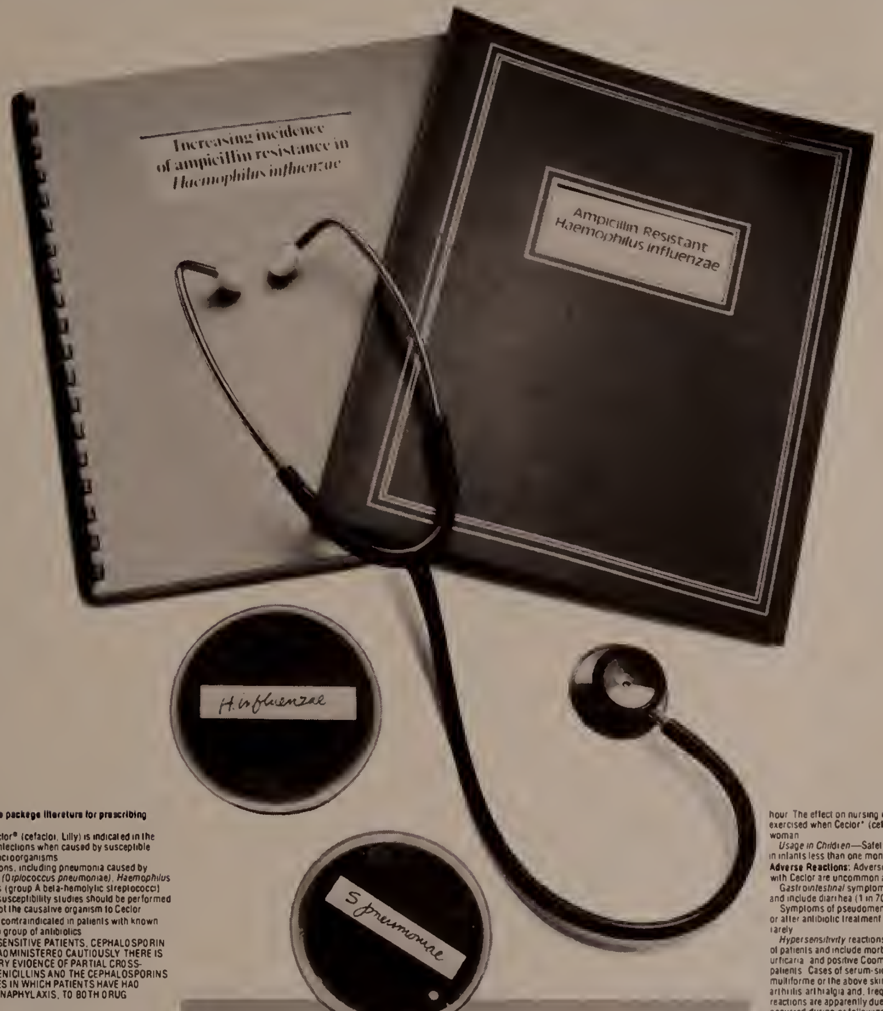
An added complication... in the treatment of bacterial bronchitis*


Increasing incidence of ampicillin resistance in Haemophilus influenzae
Ampicillin Resistant Haemophilus influenzae
H. influenzae
S. pneumoniae

Some ampicillin-resistant strains of Haemophilus Influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

Ceclor®
cefaclor

Pulvules®, 250 and 500 mg

Brief Summary. Consult the package literature for prescribing information.

Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae)*, *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions*—If an allergic reaction to Ceclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in *Pregnancy—Pregnancy Category B*—Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers—Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor® (cefaclor, Lilly) is administered to a nursing woman.

Usage in Children—Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations of SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

(061782R)

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*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.[8]

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

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New York State Journal of Medicine

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June 1983 Volume 83 Number 7

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Ativan® (lorazepam) ℂIV for Anxiety

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NEW TABLET DESIGN 0.5, 1.0 and 2.0 mg

Brief Summary of Prescribing Information.

Indications and Usage: Management of anxiety disorders or short-term relief of symptoms of anxiety or anxiety associated with depressive symptoms. Anxiety or tension associated with stress of everyday life usually does not require treatment with an anxiolytic.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence. Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia, some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

Ativan® Ⓒ
for (lorazepam)
Anxiety

DOSAGE: Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.

HOW SUPPLIED: 0.5, 1.0 and 2.0mg tablets.

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Philadelphia, PA 19101

Classified Advertising

Effective with this issue, classified advertising will appear in the front and back of the Journal. Beginning with the July issue, the classified ads will be set in a new typeface, and the section will be expanded. As the Physician Placement section is being discontinued, these listings will be incorporated into the classified ad section and will be charged at the regular classified rates. As of January 1984, classified ads will appear in a 3 column format, and there will be an increase in rates.

POSITIONS WANTED

NEW YORK RESIDENT, Fourth year foreign medical student seeks preceptorship of electives in: doctor's office, clinic, or hospital. Please phone (914) 623-5338.

PRACTICES AVAILABLE

INTERNAL MEDICINE PRACTICE for sale. Fully equipped including X-ray. Beautifully furnished. Fort Lee, New Jersey. Hospital privileges available. Reply Dept. 291, c/o NYSJM.

INTERNIST PRACTICE FOR SALE. General internal medicine and primary care. Could be expanded to family practice. 5 year old office and equipment including treadmill. Brockport, NY. College town convenient to Rochester. Dr. Eric Gross, evenings, (716) 637-2938.

INTERNAL MEDICINE—Practice for sale. Excellent opportunity to take over fully established practice. Centrally located South Shore Nassau County. Will introduce. Please reply to Dept. 290, c/o NYSJM.

ROCHESTER, N.Y. Practice suitable for Internal Medicine or Family Medicine, well established, fully equipped, available immediately or at year's end to one or two physicians. Will introduce. Quiet, growing area. Income over average. Modern house/office combination. Easy terms. Send short C.V. first letter. Dept. 288, c/o NYSJM.

PHYSICIANS WANTED

PHYSICIANS NEEDED FOR 75 SUMMER children's camps located in the Northeast July and August or a single month. Contact: Association of Independent Camps (M) 157 West 57th Street, New York, N. Y. 10019. (212) 582-3540.

EXCELLENT OPPORTUNITY in private practice for qualified internist, pediatrician, OB-GYN, in fine solidly middle class community—1 hour north of New York City. Call Dr. Adler (914) 278-2121.

PHYSICIAN DURING JULY AND AUGUST 1983 for children's camp located at Beach Lake, Pa., accommodates 350 campers, age 6–16; complete modern Health Center; 2 R.N.'s in attendance; will accept one M.D. for each month; no children accepted who are of camp age. Camp opens June 29 and closes August 23. Private room and facilities. Write (and include your phone number) to Trail's End Camp, c/o Beach Lake, Inc., 215 Adams Street, Brooklyn, N. Y. 11201.

LOCUM TENENS: for 2 to 3 weeks in July or August 1983, Monday thru Thursday noon to 4 p.m. No house or hospital calls. Midtown Manhattan, call (212) 696-1471.

DERMATOLOGIST WANTED: Opportunity available for dermatology practice serving St. Lawrence County in northern New York State; population 115,000 with 120 practicing physicians. Currently no practicing dermatologists in the area. Must be board certified or board eligible. Send CV with career remunerative goals. Reply Dept. 287, c/o NYSJM.

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Medical Society
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June 29 – July 1, 1984

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Medical Society of the State of New York
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Deadline: March 1, 1984

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*Committee on Dietary Allowances, National Research Council: *Recommended Dietary Allowances*, ed. 9. Washington, DC, National Academy of Sciences, 1980, p. 13.

Please see summary of product information on reverse page.

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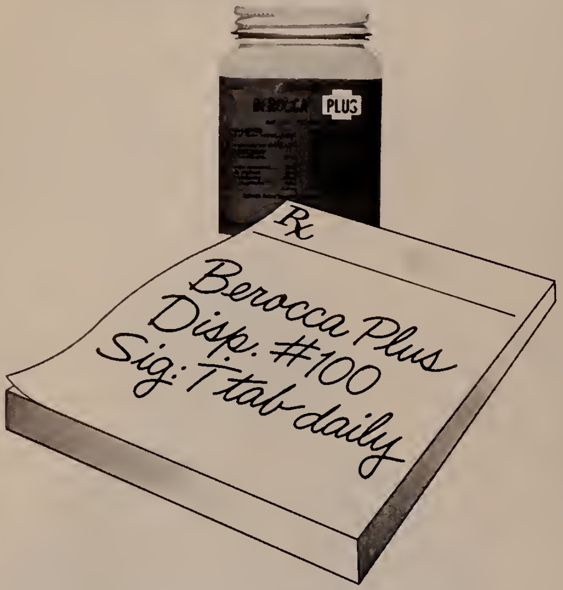
THE MULTIVITAMIN/MINERAL FORMULATION



Before prescribing, please consult complete product information, a summary of which follows:
Each Berocca® Plus tablet contains 5000 IU vitamin A (as vitamin A acetate), 30 IU vitamin E (as *dl*-alpha tocopheryl acetate), 500 mg vitamin C (ascorbic acid), 20 mg vitamin B_1 (as thiamine mononitrate), 20 mg vitamin B_2 (riboflavin), 100 mg niacin (as niacinamide), 25 mg vitamin B_6 (as pyridoxine HCl), 0.15 mg biotin, 25 mg pantothenic acid (as calcium pantothenate), 0.8 mg folic acid, 50 mcg vitamin B_{12} (cyanocobalamin), 27 mg iron (as ferrous fumarate), 0.1 mg chromium (as chromium nitrate), 50 mg magnesium (as magnesium oxide), 5 mg manganese (as manganese dioxide), 3 mg copper (as cupric oxide), 22.5 mg zinc (as zinc oxide).
INDICATIONS: Prophylactic or therapeutic nutritional supplementation in physiologically stressful conditions, including conditions causing depletion, or reduced absorption or bioavailability of essential vitamins and minerals; certain conditions resulting from severe B-vitamin or ascorbic acid deficiency; or conditions resulting in increased needs for essential vitamins and minerals.
CONTRAINDICATIONS: Hypersensitivity to any component.
WARNINGS: Not for pernicious anemia or other megaloblastic anemias where vitamin B_{12} is deficient. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with vitamin B_{12} deficiency who receive supplemental folic acid and who are inadequately treated with B_{12}.
PRECAUTIONS: *General.* Certain conditions may require additional nutritional supplementation. During pregnancy, supplementation with vitamin D and calcium may be required. Not intended for treatment of severe specific deficiencies. *Information for the Patient.* Toxic reactions have been reported with injudicious use of certain vitamins and minerals. Urge patients to follow specific dosage instructions. Keep out of reach of children. *Drug and Treatment Interactions:* As little as 5 mg pyridoxine daily can decrease the efficacy of levodopa in the treatment of parkinsonism. Not recommended for patients undergoing such therapy.
ADVERSE REACTIONS: Adverse reactions have been reported with specific vitamins and minerals, but generally at levels substantially higher than those in Berocca Plus. However, allergic and idiosyncratic reactions are possible at lower levels. Iron, even at the usual recommended levels, has been associated with gastrointestinal intolerance in some patients.
DOSAGE AND ADMINISTRATION: Usual adult dosage: one tablet daily. Not recommended for children. Available on prescription only.
HOW SUPPLIED: Golden yellow, capsule-shaped tablets—bottles of 100.

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INTERNIST: Internist, BC/BE to join rural health center specialty group as second internist. Formal linkages to tertiary center Rochester General Hospital. Income and benefits competitive. Rural lifestyle and primary care practice. EOE M/F. Write with C.V. to: Dr. Richard Endres, Sodus Health Center, P.O. Box A, Sodus, NY 14551.

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MEDICAL DIRECTOR. Large national insurance company seeks staff physician for underwriting department. Requirements include: Extensive training in cardiology and internal medicine; minimum five years experience in insurance life/health/group; excellent verbal and written communication skills. The ideal candidate should have a desire to work in a corporate medical environment among a group of close-knit professionals. Liberal benefits. Please send resume with salary requirements: Dianne Brown, Mutual of New York, 1 MONY Plaza, P.O. Box 4830, Syracuse, NY 13221.

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NEW
INDERAL LA
(PROPRANOLOL HCI) LONG ACTING CAPSULES

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Please see next page for brief summary of prescribing information.

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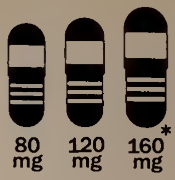
CAPSULES



BRIEF SUMMARY
(For full prescribing information, see package circular.)
INDERAL® LA brand of PROPRANOLOL HYDROCHLORIDE
(80 mg, 120 mg, 160 mg Long Acting Capsules)

DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules.

CLINICAL PHARMACOLOGY. INDERAL is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product INDERAL LA can provide effective beta blockade for a 24-hour period

The mechanism of the antihypertensive effect of INDERAL has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity

In dosages greater than required for beta-blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential The significance of the membrane action in the treatment of arrhythmias is uncertain

The mechanism of the antimigraine effect of propranolol has not been established Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable

INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension, it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic INDERAL LA is not indicated in the management of hypertensive emergencies

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block, 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL

WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

> IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema) – PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY. The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin

THYROTOXICOSIS Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol

PRECAUTIONS. General: Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus

Nursing Mothers: INDERAL is excreted in human milk Caution should be exercised when INDERAL is administered to a nursing woman

Pediatric Use: Safety and effectiveness in children have not been established

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy

Cardiovascular: bradycardia, congestive heart failure, intensification of AV block, hypotension; paresthesia of hands; thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic. pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress

Respiratory bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol

DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute for INDERAL INDERAL LA has different kinetics and produces lower blood levels Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION – *Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks

ANGINA PECTORIS – *Dosage must be individualized* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS)

MIGRAINE – *Dosage must be individualized* The initial oral dose is 80 mg INDERAL LA once daily The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS – 80-160 mg INDERAL LA once daily.

PEDIATRIC DOSAGE
At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

*The appearance of these capsules is a trademark of Ayerst Laboratories **8520/583**

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References:
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BRIEF SUMMARY
PROCARDIA® (nifedipine) **CAPSULES** For Oral Use

INDICATIONS AND USAGE: I. Vasospastic Angina: PROCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria: 1) classical pattern of angina at rest accompanied by ST segment elevation, 2) angina or coronary artery spasm provoked by ergonovine, or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography, the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PROCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e.g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm, or when angina is refractory to nitrates and/or adequate doses of beta blockers.

II. Chronic Stable Angina (Classical Effort-Associated Angina): PROCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or organic nitrates or who cannot tolerate those agents.

In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in those patients are incomplete.

Controlled studies in small numbers of patients suggest concomitant use of PROCARDIA and beta blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs (See Warnings.)

CONTRAINDICATIONS: Known hypersensitivity reaction to PROCARDIA.

WARNINGS: Excessive Hypotension: Although in most patients, the hypotensive effect of PROCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers.

Severe hypotension and/or increased fluid volume requirements have been reported in patients receiving PROCARDIA together with a beta blocking agent who underwent coronary artery bypass surgery using high dose fentanyl anesthesia. The interaction with high dose fentanyl appears to be due to the combination of PROCARDIA and a beta blocker, but the possibility that it may occur with PROCARDIA alone, with low doses of fentanyl, in other surgical procedures, or with other narcotic analgesics cannot be ruled out. In PROCARDIA treated patients where surgery using high dose fentanyl anesthesia is contemplated, the physician should be aware of these potential problems and, if the patient's condition permits, sufficient time (at least 36 hours) should be allowed for PROCARDIA to be washed out of the body prior to surgery.

Increased Angina: Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PROCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Beta Blocker Withdrawal: Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines. Initiation of PROCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PROCARDIA initiation. It is important to taper beta blockers if possible, rather than stopping them abruptly before beginning PROCARDIA.

Congestive Heart Failure: Rarely, patients, usually receiving a beta blocker, have developed heart failure after beginning PROCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event.

PRECAUTIONS: General: Hypotension: Because PROCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PROCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. (See Warnings.)

Peripheral edema: Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PROCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy. With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Drug Interactions: Beta-adrenergic blocking agents: (See Indications and Warnings.) Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PROCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina

Long-acting nitrates: PROCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Digitalis: Administration of PROCARDIA with digoxin increased digoxin levels in nine of twelve normal volunteers. The average increase was 45%. Another investigator found no increase in digoxin levels in thirteen patients with coronary artery disease. In an uncontrolled study of over two hundred patients with congestive heart failure during which digoxin blood levels were not measured, digitalis toxicity was not observed. Since there have been isolated reports of patients with elevated digoxin levels, it is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing PROCARDIA to avoid possible over- or under-digitalization.

Carcinogenesis, mutagenesis, impairment of fertility: When given to rats prior to mating, nifedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose.

Pregnancy: Category C. Please see full prescribing information with reference to teratogenicity in rats, embryotoxicity in rats, mice and rabbits, and abnormalities in monkeys.

ADVERSE REACTIONS: The most common adverse events include dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%. Syncopal episodes did not recur with reduction in the dose of PROCARDIA or concomitant antianginal medication Additionally, the following have been reported muscle cramps, nervousness, dyspnea, nasal and chest congestion, diarrhea, constipation, inflammation, joint stiffness, shakiness, sleep disturbances, blurred vision, difficulties in balance, dermatitis, pruritus, urticaria, fever, sweating, chills, and sexual difficulties. Very rarely, introduction of PROCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related. Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

Laboratory Tests: Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CPK, LDH, SGOT, and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nifedipine therapy. The relationship to PROCARDIA therapy is uncertain. These laboratory abnormalities have rarely been associated with clinical symptoms Cholestasis, possibly due to PROCARDIA therapy, has been reported twice in the extensive world literature

HOW SUPPLIED: Each orange, soft gelatin PROCARDIA CAPSULE contains 10 mg of nifedipine PROCARDIA CAPSULES are supplied in bottles of 100 (NDC 0069-2600-66), 300 (NDC 0069-2600-72), and unit dose (10x10) (NDC 0069-2600-41). The capsules should be protected from light and moisture and stored at controlled room temperature 59° to 77°F (15° to 25°C) in the manufacturer's original container.

More detailed professional information available on request.

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"I can do things that I couldn't do for 3 yrs. including joining the human race again."

Quotes from an unsolicited letter received by Pfizer from an angina patient.
While this patient's experience is representative of many unsolicited comments received, not all patients will respond to Procardia nor will they all respond to the same degree.

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"My daily routine consisted of sitting in my chair trying to stay alive."

"My doctor switched me to PROCARDIA[*] *as soon as it became available. The change in my condition is remarkable."*

"I shop, cook and can plant flowers again."

"I have been able to do volunteer work...and feel needed and useful once again."

PROCARDIA can mean the return to a more normal life for your patients—having fewer anginal attacks,[1] taking fewer nitroglycerin tablets,[2] doing more, and being more productive once again.

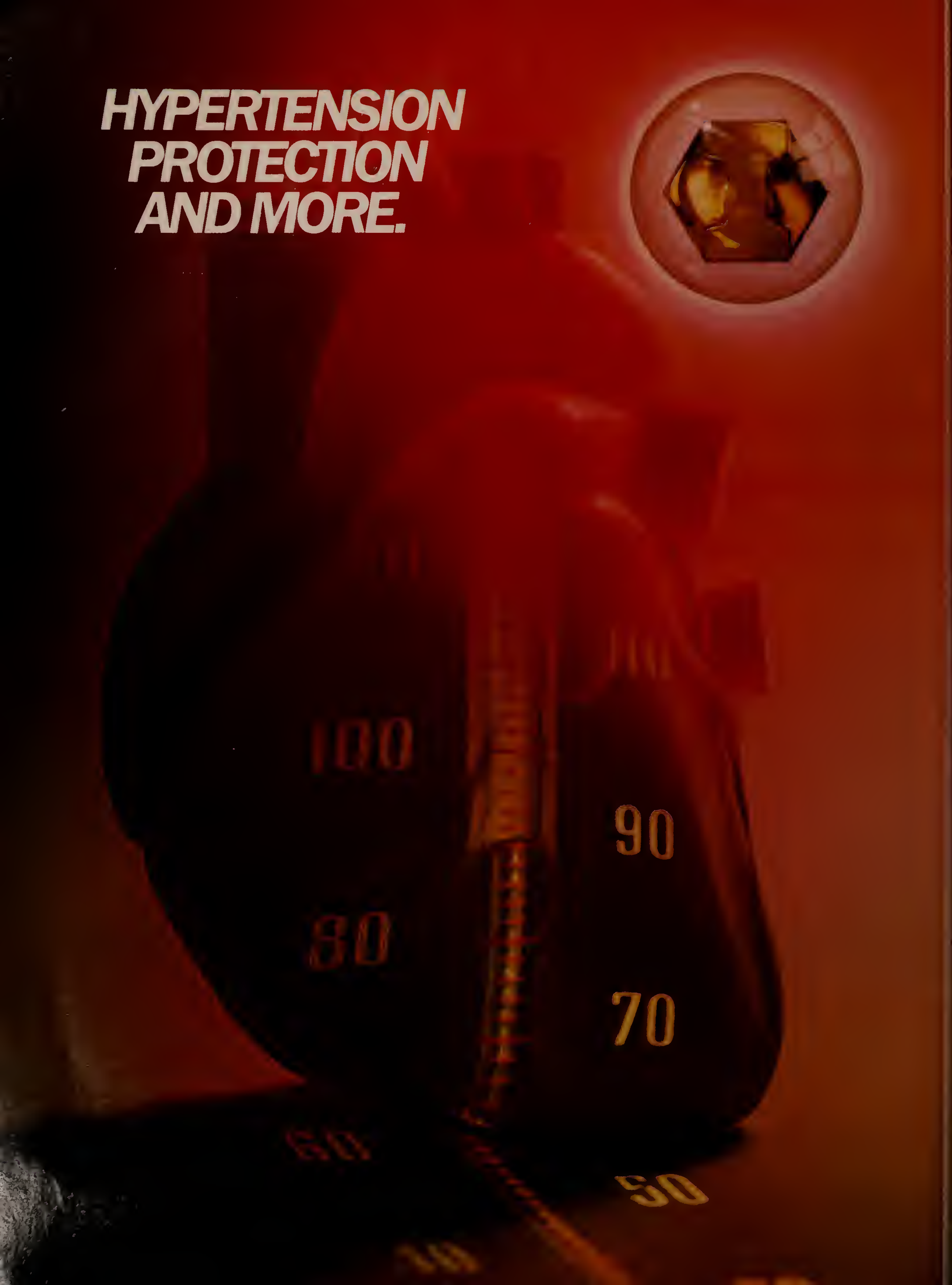
Side effects are usually mild (most frequently reported are dizziness or lightheadedness, peripheral edema, nausea, weakness, headache and flushing, each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%).

for the varied faces of angina

PROCARDIA®
(NIFEDIPINE) *Capsules 10 mg*

* Procardia is indicated for the management of:
1) Confirmed vasospastic angina.
2) Angina where the clinical presentation suggests a possible vasospastic component.
3) Chronic stable angina without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or nitrates or who cannot tolerate these agents. In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks' duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in these patients are incomplete.

Please see PROCARDIA *brief summary on adjoining page.*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INDERAL acts to reduce catecholamine-induced "spiking" of blood pressure which often coincides with the physical and emotional stress in a hypertensive's life.[3] INDERAL reduces elevated heart rate, force of ventricular contraction, and cardiac work load—providing smooth control of hypertension to decrease the risk of related cardiovascular complications. (INDERAL should not be used in the presence of congestive heart failure, sinus bradycardia, heart block greater than first degree, or bronchial asthma.)

INDERAL works in a way that non-beta blockers can't—to provide long-term cardiovascular benefits.

INDERAL provides treatment for coexisting angina pectoris or cardiac arrhythmias in addition to reducing blood pressure—for comprehensive protection. What's more, INDERAL is well tolerated, acting with few of the distressing side effects of antihypertensive agents such as methyldopa or reserpine. Impotence, depression, sedation, orthostatic hypotension, and nasal stuffiness are rare. (Please see following page for Brief Summary of Prescribing Information, including side effects of INDERAL.)

Indeed, INDERAL has changed the face of antihypertensive therapy, worldwide. And it continues to do so—with an unparalleled record of clinical efficacy and experience.

INDERAL. It's the kind of protection hypertensive patients need—right from the start.

References: 1. Traub, Y. M., *et al.*: Clin. Pharmacol. Ther. *28*:765 (Dec.) 1980. 2. Hollifield, S.W., and Slaton, R.E.: Acta Med. Scand. *647* (Suppl.):67, 1981. 3. Cohen, J.D.: Propranolol vs. diuretics in initial therapy for hypertension. Medical Education Programs Ltd., Ayerst Laboratories, 1982.

INDERAL®
(PROPRANOLOL HCl)

Comprehensive Cardiovascular Protection

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IN HYPERTENSION START WITH

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BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)
Inderal® (propranolol hydrochloride)

BEFORE USING INDERAL (PROPRANOLOL HYDROCHLORIDE), THE PHYSICIAN SHOULD BE THOROUGHLY FAMILIAR WITH THE BASIC CONCEPT OF ADRENERGIC RECEPTORS (ALPHA AND BETA), AND THE PHARMACOLOGY OF THIS DRUG

CONTRAINDICATIONS

Propranolol hydrochloride is contraindicated in 1) bronchial asthma; 2) allergic rhinitis during the pollen season; 3) sinus bradycardia and greater than first degree block; 4) cardiogenic shock, 5) right ventricular failure secondary to pulmonary hypertension; 6) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol, 7) in patients on adrenergic-augmenting psychotropic drugs (including MAO inhibitors), and during the two week withdrawal period from such drugs.

WARNINGS

CARDIAC FAILURE. Sympathetic stimulation is a vital component supporting circulatory function in congestive heart failure, and inhibition with beta blockade always carries the potential hazard of further depressing myocardial contractility and precipitating cardiac failure. Propranolol acts selectively without abolishing the inotropic action of digitalis on the heart muscle (i.e., that of supporting the strength of myocardial contractions). In patients already receiving digitalis, the positive inotropic action of digitalis may be reduced by propranolol's negative inotropic effect. The effects of propranolol and digitalis are additive in depressing AV conduction.

IN PATIENTS WITHOUT A HISTORY OF CARDIAC FAILURE, continued depression of the myocardium over a period of time can, in some cases, lead to cardiac failure. In rare instances, this has been observed during propranolol therapy. Therefore, at the first sign or symptom of impending cardiac failure, patients should be fully digitalized and/or given a diuretic, and the response observed closely: a) if cardiac failure continues, despite adequate digitalization and diuretic therapy, propranolol therapy should be immediately withdrawn; b) if tachyarrhythmia is being controlled, patients should be maintained on combined therapy and the patient closely followed until threat of cardiac failure is over.

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease, who are given propranolol for other indications.

IN PATIENTS WITH THYROTOXICOSIS, possible deleterious effects from long-term use have not been adequately appraised. Special consideration should be given to propranolol's potential for aggravating congestive heart failure. Propranolol may mask the clinical signs of developing or continuing hyperthyroidism or complications and give a false impression of improvement. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. This is another reason for withdrawing propranolol slowly. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

IN PATIENTS UNDERGOING MAJOR SURGERY, beta blockade impairs the ability of the heart to respond to reflex stimuli. For this reason, with the exception of pheochromocytoma, propranolol should be withdrawn 48 hours prior to surgery at which time all chemical and physiologic effects are gone according to available evidence. However, in case of emergency surgery, since propranolol is a competitive inhibitor of beta-receptor agonists, its effects can be reversed by administration of such agents, e.g., isoproterenol or levarterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in restarting and maintaining the heart beat has also been reported.

IN PATIENTS PRONE TO NONALLERGIC BRONCHOSPASM (e.g., CHRONIC BRONCHITIS, EMPHYSEMA), propranolol should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETICS AND PATIENTS SUBJECT TO HYPOGLYCEMIA. Because of its beta-adrenergic blocking activity, propranolol may prevent the appearance of premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia. This is especially important to keep in mind in patients with labile diabetes. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

USE IN PREGNANCY: The safe use of propranolol in human pregnancy has not been established. Use of any drug in pregnancy or women of childbearing potential requires that the possible risk to mother and/or fetus be weighed against the expected therapeutic benefit. Embryotoxic effects have been seen in animal studies at doses about 10 times the maximum recommended human dose.

PRECAUTIONS

Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if propranolol is administered. The added catecholamine-blocking action of this drug may then produce an excessive reduction of the resting sympathetic nervous activity. Occasionally, the pharmacologic activity of propranolol may produce hypotension and/or marked bradycardia resulting in vertigo, syncopal attacks, or orthostatic hypotension.

As with any new drug given over prolonged periods, laboratory parameters should be observed at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function.

ADVERSE REACTIONS

Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; arterial insufficiency, usually of the Raynaud type; thrombocytopenic purpura. *Central Nervous System:* lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. *Gastrointestinal:* nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis. *Allergic:* pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress. *Respiratory:* bronchospasm. *Hematologic:* agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura. *Miscellaneous:* reversible alopecia. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been conclusively associated with propranolol. *Clinical Laboratory Test Findings:* Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

HOW SUPPLIED

INDERAL (propranolol hydrochloride)

TABLETS

—Each hexagonal-shaped, orange, scored tablet is embossed with an "I" and imprinted with "INDERAL 10," contains **10 mg** propranolol hydrochloride, in bottles of 100 (NDC 0046-0421-81) and 1,000 (NDC 0046-0421-91). Also in unit dose package of 100 (NDC 0046-0421-99).

—Each hexagonal-shaped, blue, scored tablet is embossed with an "I" and imprinted with "INDERAL 20," contains **20 mg** propranolol hydrochloride, in bottles of 100 (NDC 0046-0422-81) and 1,000 (NDC 0046-0422-91). Also in unit dose package of 100 (NDC 0046-0422-99).

—Each hexagonal-shaped, green, scored tablet is embossed with an "I" and imprinted with "INDERAL 40," contains **40 mg** propranolol hydrochloride, in bottles of 100 (NDC 0046-0424-81) and 1,000 (NDC 0046-0424-91). Also in unit dose package of 100 (NDC 0046-0424-99).

—Each hexagonal-shaped, pink, scored tablet is embossed with an "I" and imprinted with "INDERAL 60," contains **60 mg** propranolol hydrochloride, in bottles of 100 (NDC 0046-0426-81) and 1,000 (NDC 0046-0426-91). Also in unit dose package of 100 (NDC 0046-0426-99).

—Each hexagonal-shaped, yellow, scored tablet is embossed with an "I" and imprinted with "INDERAL 80," contains **80 mg** propranolol hydrochloride, in bottles of 100 (NDC 0046-0428-81) and 1,000 (NDC 0046-0428-91). Also in unit dose package of 100 (NDC 0046-0428-99).

The appearance of these tablets is a trademark of Ayerst Laboratories.

Store at room temperature (approximately 25° C).

INJECTABLE

—Each ml contains 1 mg of propranolol hydrochloride in Water for Injection. The pH is adjusted with citric acid. Supplied as 1 ml ampuls in boxes of 10 (NDC 0046-3265-10).

Store at room temperature (approximately 25° C).

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On fostering research among young physicians

The New York State Society of Anesthesiologists held the 36th Postgraduate Assembly in New York City last December. Over 5,000 registrants from all parts of the United States and 20 countries overseas attended the five-day meeting. The program informs anesthesiologists of recent activities at the various teaching centers and provides younger members of the specialty of an opportunity to present the results of their investigations at a well-attended meeting.

The Residents' Program was first presented at the Fourth Postgraduate Assembly in 1950 and met with immediate success. To be eligible, the work had to be done during the individual's period of training. Twenty-eight papers were presented that first year. Clinical presentations were in the majority and dealt with such subjects as continuous spinal anesthesia, trichlorethylene ether, cyclopropane, and antiarrhythmic studies with procaine amide. The value of studies in respiration prior to operation was emphasized. An intra-arterial transfusion method was described. The young investigators came from all over the United States and Canada. Among them were two physicians, Robert Hicks, MD who spoke on his experiences with intravenous gelatin and John S. Hattox, MD who considered an adaptation of the mass spectrometer to the determination of blood nitrous oxide in man. Both men became presidents of the American Society of Anesthesiologists. Several others, including John P. Dunbar, MD, Frederick Hehre, MD, and Carl Wasmuth, MD, became leaders in the anesthetic world.

The Residents' Program became an established feature of the Annual Postgraduate Assembly. Over the next few years the early works of many anesthesiologists who were to become professors or chairmen in major departments in the United States were presented. Included among them were Evan Frederickson, MD (Emory University), Donald Benson, MD (University of Chicago), Marjorie Topkins, MD (Cornell University), Leonard Fabian, MD (University of Mississippi), Joachim Gravenstein, MD (Case Western Reserve University), Valentino Mazzia, MD (New York University), Carter Ballinger, MD (University of Utah), John Steinhaus, MD (Emory University), Deryk Duncalf, MD (Yeshiva University), Alan Van Poznak, MD (Cornell University), William Hamilton, MD (University of California, San Francisco), Peter Safar, MD (University of Pittsburgh), and Howard Zauder, MD (State University of New York, Syracuse).

The title of the program has evolved to Current Research by New Investigators. The spirit of the program remains the same, and a monetary prize has been added. The work must be performed during training. Anonymity of authorship and institution affiliation is strictly maintained during the evaluation process. Early in the year, abstracts are submitted and a judging committee invites the authors of what it feels are the most promising work to submit full manuscripts. A final selection of five studies for presentation at the meeting is then made. The authors are allotted ten minutes, and an invited speaker then comments on the work for a few minutes, followed by a general discussion.

The abstracts of the five papers presented are published in this issue of the *Journal*. The judges had a particularly difficult job in deciding a winner. Based on scientific merit, originality, clinical applicability, and technique of presentation, first prize was awarded jointly to Deborah J. Dehring, MD of Ohio State University and Karen B. Domino, MD, University of Pennsylvania.

The members of the committee of the Current Research by New Investigators Program commend the participants and look forward to their future scholarly contributions. Individuals interested in participating in the program may write to John Gerson, MD, Department of Anesthesiology, State University of New York—Upstate Medical Center, 750 East Adams St, Syracuse, NY 13210.

ELIZABETH A. M. FROST, MD
Professor of Anesthesiology
Albert Einstein College of Medicine of Yeshiva University

Letters to the Editor

Address letters to Editor, **New York State Journal of Medicine, 420 Lakeville Road, P.O. Box 5404, Lake Success, New York 11042.**

The *Journal* welcomes and encourages letters to the editor. Letters should be succinct and precise. Preference for publication will be given to those not exceeding 450 words. Letters must be typewritten and double-spaced, with six or fewer references. The references should be based on the style used in *Index Medicus.* Letters should not duplicate manuscripts or correspondence submitted to other journals, newspapers, or magazines. The signature, academic degree, professional affiliation, and address of each author must be included. Every effort will be made to expedite the publication of accepted letters. All letters are personally acknowledged by the editor.

Parotid gland enlargement during treatment of acute bronchial asthma

To the Editor: I would like to report a case in which intensive treatment of acute bronchial asthma was associated with painless bilateral parotid gland enlargement on two separate occasions. When the dose of adrenergic stimulants was reduced, the parotid enlargement disappeared.

Case report. A 68-year-old woman who had a seven-year history of asthma was admitted with acute shortness of breath. Over the previous few years she had been admitted on numerous occasions with similar symptoms. Routine bronchodilator therapy was started (Table). During the first 72 hours she was given epinephrine 0.3 cc on six occasions before her symptoms started to improve. During the second week she was noted to have bilateral painless parotid gland enlargement. Her asthmatic symptoms resolved during the following week, the parotid gland enlargement became less noticeable, and she was discharged. Three months before, during another admission, she was also noted to have parotid gland enlargement which subsided spontaneously. It was noted that the patient demanded and received isoetharine (Bronkosol) on a two-hourly basis even after her symptoms and signs of asthma had considerably improved.

Discussion. Parotid gland enlargement has been reported as a side effect of each of the following drugs: sulphonamides,[1] iodides,[2-4] phenylbutazone,[5] thioridazine,[6] and methyldopa.[7] It has also been reported during induction of anesthesia when atropine and succinylcholine are used.[8] It was reported once during endoscopy, but in that case when the patient was later rechallenged with each of the individual premedications parotid enlargement could not be reproduced.[9] Borsanyi and Blanchard,[10,11] observing submaxillary gland enlargement in one patient within five days of beginning isoproterenol therapy, stated that the role of isoproterenol in parotid gland enlargement "was not definitely established." They later administered 30 mg isoproterenol twice daily to rats for 21 days; the rats were then killed and examination of the parotid glands showed extreme enlargement due to increased secretory activity and proliferation of acinar and duct cells. This work has been confirmed by others.[12,13]

Tracheal mucus production in the cat has been stimulated by sympathetic amines and has been prevented by beta-blocking agents.[14] Lacrimal flow in rabbits has been facilitated by isoprenaline and inhibited by propranolol.[15] Katz and Mandel[16] observed that intravenous isoproterenol consistently increased the amylase and protein content of the parotid and submaxillary glands in human volunteers, and that the actions of isoproterenol were inhibited by beta-blocking agents and enhanced by alpha blockade; he suggested that alpha and beta receptors served different functions.

Dose Given Per 24 Hours

Medication	*Week 1*	*Week 2*
Epinephrine	0.5 mL	. . .
Terbutaline	15 mg	15 mg
Isoetharine*	3.5 mL	2.5 mL
Aminophylline	900 mg	1,000 mg
Methylprednisolone†	600 mg	600 mg

* Isoetharine 1% given by aerosol and diluted by saline.

† Methylprednisolone changed to oral prednisone on fourth day of week 2.

The temporal relationship between the use of beta-adrenergic stimulants and the development of parotid enlargement appears to indicate that the beta stimulation played a role in this patient.

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Nursing home visits

To the Editor: In a letter to the editor (*New York State J Med 1983; 83:290*) Fred Flateau, MD suggested that the House of Delegates of MSSNY erred in adopting Resolution 82-50 (Nursing Home Visits Based-On-Need), which opposes mandatory visit by a physician to a patient in a nursing home at least once a month. I wholeheartedly disagree with Dr. Flateau.

Ten years ago, in response to exposés of scandals that had occurred in nursing homes in New York City, the State Department of Health decided to tighten its enforcement of rules governing the industry. Since then, every aspect of skilled nursing facilities has been tightly regulated, even down to the number of beds that are allowed to be developed. The result has been a slowing down of the expansion of these nursing facilities and a concomitant rise in the cost of long-term patient care.

The practice of medicine has also been adversely affected, as illustrated by the regulation that each physician must see each nursing home patient every 30 days. I feel that the interval between physician visits should be freely decided between physician and patient and should not be a subject of State regulation.

There are elderly patients cared for at home by their families who are quite properly seen by a physician every three months or so. These same patients, if residing in a skilled nursing facility, and under constant professional supervision, are nonetheless required by State regulation to be seen by their physicians every 30 days. The patients themselves, who may pay at least a part of the bill, have under the law no input as to how often they would like to be seen.

Nursing facilities are threatened with loss of State revenues if physicians are "late" in their calls. As a result, physicians are hassled by nurses and administrators. Oddly, a federal Medicare regulation says that a patient in a skilled nursing facility may not be seen more than once in any month for routine medical purposes and that a physician will not be paid for a second call unless there is written proof that he has been called to see his patient in an emergency.

On the other hand, the New York State regulation specifies that each patient is to be seen every 30 days. A ludicrous situation arises in those seven months which have 31 days. If a physician were to have seen his patient on the first and 31st day of a given month, he would be seeing his patient too frequently under the federal Medicare regulation and thus would not be eligible for payment. On the other hand, he would be "late" by State regulation and the nursing home would be subject to financial penalty for this.

As a result of the inability of large numbers of practicing physicians to adhere to the bizarre 30-day regulation, many fine physicians have been removed from the staffs of skilled nursing facilities, thus reducing the numbers of physicians visiting nursing homes. A number of skilled nursing facilities have actually developed closed full-time staffs admittedly for the purpose of getting a group of controlled physicians who will submissively write orders on the 30th day.

Another interesting State regulation indicated that if a physician requests and receives approval from the local utilization committee, he may be permitted to visit a patient at a two-month interval. This regulation is, however, negated by still another regulation which indicates that a pharmacist may not renew medications unless there has been a written monthly order by the physician. There have been many dangerous instances wherein vital medications have been withheld from patients because a physician had failed to renew orders exactly on the 30th day.

The deleterious effect of such regulation in our nursing homes is now visible throughout the health care delivery system. Hospitals are crowded with thousands of elderly patients who should have been transferred to skilled nursing facilities, but who occupy acute-care beds because long-term care beds are not available. The backlog is filling our emergency rooms.

The House of Delegates of MSSNY is to be commended for its recent vote in favor of recommending elimination of the odious 30-day rule.

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Patient-physician relationships

To the Editor: I would like to congratulate Dr. Candela for his excellent editorial on "Patient-Physician Relationships—A Growing Void" (*New York State J Med* 1982; 82:1661).

I agree with his approach to medicine but I would like to give my opinions on why medicine has changed.

I have observed that extensive documentation of the patient's history and physical findings are frequently ignored in legal procedures. An example is a Workman's Compensation Board Hearing where the question was not whether or not the patient had complaints of numbness and absence of sensation was found along the patient's leg, but whether or not the electromyelogram, the x-rays, and the CAT scan were positive. Since the same questions that are raised by attorneys at compensation hearings are also raised in negligence, liability, and malpractice cases, is it not in part the fault of the medical profession to have allowed this "documentation" of facts to get out of hand?

Another question I would like to raise is in regard to Dr. Candela's statement, "The patient has a right to see his own record, or obtain a copy, on written request." What is the patient's record and what is the doctor's record? I feel a physician has a right to keep personal notes, memoranda, and data for his own reference. Such should constitute his records and not the patient's file, which the patient has the right to review.

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Dr. Candela's reply

To the Editor: I thank Dr. Goodman for his generous comments. We both bemoan the current trend of incomplete histories and physical examinations, the disregard of the patient's complaint, and the substitution of mechanical studies for rationally considered thoughts and perceptions. I can only quote again the words of Osler and my Professor of Medicine: ". . . let the patient talk and he'll give you the diagnosis. . . ." Today we are exposed to a coterie of tubular-visioned, self-impressed prescient individuals who consider the patients negative or uncooperative if they fail to respond to "treatment" for a preconceived diagnosis.

In regard to the question of the patient's "right" to see his record, this has been clarified by legal decisions elicited through efforts of the State Society (*News of New York*, Aug. 1 and Sept. 15). A patient may authorize his physician to submit a report on his entire record to another physician, but the original physician may keep his personal notes or papers as his work sheets.

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Large abdominal aortic aneurysm and portal hypertension

To the Editor: The combination of a large abdominal aortic aneurysm and severe portal hypertension with massive gastrointestinal hemorrhage presents a challenging surgical problem. Portal hypertension due to intrahepatic block results in turgid retroperitoneal venous anastomoses, making dissection of the abdominal aorta hazardous. The presence of a large aortic aneurysm presents a technical impediment to the placement of a mesocaval shunt.

Case report. A 68-year-old man was admitted to Flushing Hospital and Medical Center with massive upper gastrointestinal hemorrhage. Emergency endoscopy showed large esophageal varices and no other source of gastroduodenal hemorrhage. He related having had hepatitis many years before but denied ever having abused alcohol. On examination, he had 4–5 cm hepatomegaly and a pulsating abdominal mass which on subsequent sonography proved to be a large (10-cm) abdominal infrarenal aortic aneurysm.

One month after admission, his abdominal aortic aneurysm was resected. The postoperative course was complicated by ascites secondary to salt loading. This cleared with appropriate therapy. A week later, he underwent interposition (H graft) mesocaval shunt using a 16-mm polytetrafluoroethylene (PTFE) graft. This was performed with surprising ease. His postoperative course was benign. He has had no further bleeding episode since portal decompression nearly four years ago.

Discussion. The coexistence of portal hypertension and large abdominal aortic aneurysm presents a challenging problem. Extensive retroperitoneal vascularization in the former condition will make the latter procedure hazardous.[1] Technical and mechanical problems of placement of interposition mesocaval graft in the presence of a large aneurysm are difficult. Since a large abdominal aortic aneurysm presents a technical impediment to placement of a mesocaval H graft and is a life-threatening lesion, this should be tackled first. Eliminating the aneurysm makes placement of the mesocaval shunt surprisingly easy. As in the case reported, liberal use of electrocautery in careful dissection of the vena cava and superior mesenteric vein is essential. A nonresective treatment of abdominal aortic aneurysm also deserves consideration.[2]

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Erratum. *An error occurred in the letter to the editor by Sidi et al on Acute myeloblastic leukemia and insecticide (New York State J Med 1983; 83:161). The correct figure for the patient's white blood cell count is* 1×10^3*, and for the platelet count,* 7×10^4*. The Journal is grateful to Robert E. Wolf, MD, Brooklyn Heights, NY for spotting this error.*

Erratum. *An error occurred in the editorial, "Hypertension in diabetes Mellitus," by Nieman and Davis (New York State J Med 1983; 83:688–690). The sentence beginning the first paragraph on page 690 should read: When promptly recognized, thiazide-related hyperglycemia can be satisfactorily treated with more aggressive insulin or sulfonylurea administration.*

Methadone and Intravenous Morphine Requirements

Treatment of pain due to advanced cancer

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Nineteen patients with intractable pain due to cancer were treated with oral methadone. Narcotic requirements were calculated after pain relief was achieved with a continuous intravenous morphine infusion. This varied considerably in the individuals so treated. To prevent complications with methadone, titration of patients with intravenous morphine for narcotic requirements is first recommended. Two thirds of the 24-hour morphine requirement is a safe and adequate methadone dose to achieve acceptable pain relief. Psychotropic and nonsteroidal anti-inflammatory drugs were useful to obtain optimal analgesia.

Oral narcotic analgesics have long been used in the treatment of pain due to advanced cancer. The goal of the treatment is to provide 24-hour pain relief by maintaining an unclouded sensorium during the day and a restful sleep during the night. Most physicians still prescribe narcotic analgesics to patients on a whenever-necessary basis, which results in an uneven blood level with periods of under- or over-medication. In recent years, it has been realized that, to achieve continuous pain relief, anticipation and prevention of pain, rather than treatment of pain after it has returned, should be provided.[1]

The ideal method of achieving this goal is the continuous intravenous infusion of narcotic analgesics. This method has been used effectively in moribund patients with pain due to cancer[2,3] and for postoperative pain.[4] The continuous intravenous infusion technique is not practical in ambulatory patients. To achieve a comparable constant analgesic blood level, a long-acting oral narcotic such as methadone must be employed. However, the methadone requirement is difficult to estimate since it depends on the patient's age, stage of debility, length of previous drug administration, drug interaction, and liver and kidney function.

We are reporting our results with intravenous morphine for the evaluation of narcotic maintenance requirements in ambulatory patients.

Materials

The accompanying table shows age, sex, primary cancer site, metastatic spread, drugs used, results, and complications. Nineteen patients, 10 women and 9 men, with intractable pain due to cancer, were hospitalized; their ages ranged from 17 to 76 years, with an average of 56 years. All had been on large doses of narcotics without adequate pain control. Seventeen of 19 patients had metastases. Seventeen patients had previously undergone surgery; chemotherapy or radiotherapy or both had been or were being used in all except five patients. In each instance, pain had not been successfully controlled with various narcotic analgesics.

Method

After all analgesic medication was discontinued, an intravenous loading dose of morphine sulphate in small increments of 0.5 to 1 mg was injected intravenously every two minutes. The injection was terminated when adequate analgesia was obtained or respiratory rate dropped below 14/min. Analgesia was maintained with the aid of a continuous intravenous drip using an infusion pump, by dissolving 20 to 30 mg of morphine sulphate in 500 ml of 5% dextrose $\frac{1}{4}$ saline. After several hours of sustained analgesia, the morphine infusion was discontinued and the 24-hour morphine requirement was calculated.

An attempt was made to maintain analgesia with oral methadone. In the first six patients, the

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Control of intractable pain due to cancer in 19 patients

			Diagnosis Cancer		Dose of Morphine (mg)			Dose of Methadone (mg)			Other Drugs*	
Patient	Sex	Age	Primary Site	Metastatis	Loading	Optimal 24 hour	Results	Initial 24 Hours	Final 24 Hours	Results	Tricyclic antidepressants	Nonsteroidal anti-inflammatories
1	F	70	Breast	+	6	48	G	70	40	G	+	+
2	F	61	Breast	+	7	72	G	...	55	G	+	+
3	F	55	Breast	+	10	144	G	...	100	F	+	+
4	F	52	Breast	+	3	18	E	...	20	G	+	+
5	F	32	Breast	+	5	48	E	70	30	G	+	+
6	F	45	Breast	–	6	288	G	...	160	E	+	+
7	M	62	Prostate	+	4	72	G	...	60	G	...	+
8	M	71	Prostate	+	5	18	E	...	20	G	...	+
9	M	59	Prostate	+	6	192	G	145	60	G	...	+
10	M	72	Prostate	+	5	24	G	35	20	G	+	...
11	M	59	Lung	+	7	72	G	...	60	N	...	+
12	M	76	Lung	+	4	24	G	...	15	G	+	+
13	F	56	Sigmoid	+	3	12	E	...	20	G	...	+
14	F	63	Sigmoid	–	4	24	E	...	20	E	+	...
15	M	59	Stomach	+	4	96	G	...	70	G	...	+
16	M	51	Rectum	+	5	120	G	180	90	G	+	+
17	F	17	Hodgkin's	+	7	96	E	140	70	E	...	...
18	F	53	Pancreas	+	9	216	G	...	160	N	+	...
19	M	60	Melanoma	+	5	72	G	...	55	G	+	...

Results: E = excellent; G = good; F = fair, N = none.

* Other drugs: dextroamphetamine—patient 7 and 19; haloperidol—patient 10 methotrimeprazine—patient 3.

Complications after methadone adjustment: patient 3—nausea; patient 9—sedation, nausea, and hallucinations; patient 11—hallucinations; patient 18—hallucinations and ileus.

methadone requirement was calculated by multiplying the 24-hour morphine requirement in milligrams by 1.5. In the remaining 13 patients, a factor of ⅔ was used. This reduction was made because the larger dose resulted in complications such as drowsiness, nausea, hallucinations, and fecal obstruction on the second or third day. Even this decreased dose had to be tapered down, occasionally, after three to four days. Methadone was prescribed to be taken in three to four divided doses. Once analgesia had been obtained with minimal side effects, psychotropic and nonsteroidal anti-inflammatory drugs were added when indicated. Pain relief was evaluated as follows:

Excellent: patient comfortable ambulatory and at rest.

Good: patient comfortable at rest and increased ambulation.

Fair: residual pain at rest.

None: methadone had to be abandoned because of complications.

Results

The loading dose of morphine ranged between 3 mg to 10 mg, with an average of 5.6 mg. With the continuous infusion in seven patients, more than two days were required before satisfactory, stable pain relief was obtained. The range of morphine requirement was very large, 18 to 288 mg/24 h. All patients experienced good to excellent pain relief with the intravenous morphine infusion. Methadone doses ranged between 20 to 160 mg, with an average of 60 mg. Pain relief was excellent in the two patients without metastases; good in 14; fair in one; and ineffective in two who were rapidly deteriorating—intravenous (IV) morphine was restarted and used until they died. In addition, 12 patients had a small dose of tricyclic antidepressants at night; 14 received nonsteroidal anti-inflammatories; two needed dextroamphetamine to be more alert; one received haloperidol; and one was given methotrimeprazine at bedtime.

Discussion

Pain in general, but pain due to cancer in particular, is complicated by anxiety and depression. To cope with the latter conditions, the noxious stimulus must first be dealt with. When pain is diffuse and methods such as additional chemotherapy or radiotherapy are still in process, or their benefits exhausted, narcotic analgesics are indicated. To have a continuous analgesic blood level, the ideal method of drug administration is the continuous intravenous infusion, which allows titration of the individual requirements for optimal analgesia without undue side effects. This results in a minimal effective analgesic concentration, difficult or impossible to achieve with intermittent drug administration. An intravenous method is not suited for the ambulatory patient, thus an oral narcotic analgesic must be substituted. Our choice is methadone, which has the longest half-life ($t^{1/2}$) among the narcotics in use and, therefore, is suitable for administration every six to eight hours without disturbing night rest. The dose and frequency of administration of methadone as recommended by pharmacologic references may lead to drug administration and overdose.[5] The t½ of morphine is relatively short (less than four hours). The major route of morphine elimination is hepatic biotransformation. The high hepatic extraction ratio indicates that oral morphine will undergo extensive first-pass metabolism. Only about 30% of an orally administered dose reaches the systemic circulation. In contrast, methadone has an average t½ of about 14 hours and an average secondary t½ of about 55 hours.[6] The t½ of analgesic effect of methadone is 4 to 6 h.[7] Fifty per cent of methadone is absorbed from the gastrointestinal tract; therefore, it is more suitable than morphine as an oral analgesic. In single-dose evaluation, morphine and methadone are equianalgesic intramuscularly while methadone is three times as potent as morphine orally.[7] When calculations were made based on this information, complications such as depression, hallucination, nausea, and paralytic ileus were seen on the second or third day. In prolonged administration, we found that if complications are to be avoided, methadone, because of the long t½ has to be administered in ⅔ of the calculated 24-hour IV morphine requirement. The addition of psychotropic and nonsteroidal anti-inflammatory drugs most likely influenced the results obtained. The psychotropic drugs not only elevate the patients' mood and increase sedation, but also potentiate analgesia. The nonnarcotic analgesics used are also efficient analgesics if used in adequate doses and frequent intervals, and the satisfactory pain relief in 16 of 19 patients was no doubt influenced by their use.

Summary

Nineteen patients with intractable pain due to cancer were treated with oral methadone. Narcotic requirements were calculated after pain relief was achieved with a continuous intravenous morphine infusion. This varied considerably in the individuals so treated. To prevent complications with methadone, titration of patients with intravenous morphine for narcotic requirements is first recommended. Two thirds of the 24-hour morphine requirement is a safe and adequate methadone dose to achieve acceptable pain relief. Psychotropic and nonsteroidal anti-inflammatory drugs were useful to obtain optimal analgesia.

Acknowledgment. The authors wish to acknowledge the cooperation of Edward Greenwald, M.D., and the oncology staff of Montefiore Medical Center.

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Nipple Discharge

Frequency and pathogenesis in an ambulatory population

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The frequency of nipple discharge was determined in an ambulatory population. It was found to be very common prior to the menopause in both nulligravida and multipara. Its pathogenesis could be traced in slightly more than half of the cases. Prolonged lactation and drugs were the most common causes; a pituitary adenoma was held responsible in only 2.2% of those with discharge.

Interest in breast secretion has increased with the advent of the radioimmune assay for prolactin. This investigation was undertaken to learn the frequency and pathogenesis of nipple discharge in an unselected ambulatory female population. "Galactorrhea" and "inappropriate lactation" imply that the secretion is milk. The term "discharge" was chosen, because no test for casein, lactalbumen, or lactose was performed and fat stain, alone, has been judged inadequate.[1]

Method

An annual routine health-maintenance examination was performed on 2,685 consecutive members of the International Ladies Garment Workers Union. Appointments for this survey were made weeks or months in advance and, although presumably on asymptomatic women, complaints or abnormal signs were often extracted by the examining physician. From this group, the frequency of nipple discharge was determined. Fifty-three other women were examined to study its occurrence in pregnancy. To study its pathogenesis, a larger pool was obtained. To the 270 examples of discharge found on the routine survey were added 352 others, comprising every case of nipple discharge found in all of our clinics within the past three years.

In addition to the usual examination, the breasts were firmly compressed towards the nipple. If any discharge was elicited, a fasting morning serum prolactin value was obtained. In this clinic, 94.1% of female controls had a prolactin level below 25 ng/mL, and the upper limit was 29.9 ng/mL. If the prolactin level was repeatedly above normal, x-ray films of the sella turcica were obtained. Initially hypocycloidal tomography was relied on, but this was replaced by 2-mm, high-resolution, computerized axial tomography of the sella, reinforced by the intravenous injection of meglumine diatrizoate. When indicated, visual fields were studied by Goldman perimetry.

Findings

Table I indicates the frequency of nipple discharge, correlated with age and parity. Discharge was found in both breasts in 90.8% of the patients. In many instances, the gross character of the discharge differed from one nipple to the other and from one duct to another in the same breast. Occasionally, persistent pressure caused an initially serous secretion to be followed by a thick, milky fluid. Discharge was found in 19.5% of premenopausal women compared to 2.1% in those after the menopause. There was discharge in 21.6% of parous women compared to 13.4% of nulligravida between the ages of 16 and 50. In the pregnant group, it was elicited in 2 of 9 women in the first trimester; 9 of 15 in the second; and 26 of 29 in the third.

Table II lists all disorders associated with nipple discharge cited in the literature. We have added a previously unreported one, chronic hidradenitis of the axillae. The table includes the number of our cases allotted to each cause and how often the serum prolactin level was above normal. Only completely studied patients were included.

Frequency of nipple discharge

The wide variation between reported frequencies of nipple discharge is largely due to the character of the patient population and whether or not the breast was compressed during examination. General surgeons are primarily concerned with intrinsic breast disease in a single breast and often expect the secretion to be spontaneous. Nipple discharge has been reported in 6.5% of 8,640 women in five series of women subjected to breast surgery[2-6] and in 8.8% of 10,365 women in six groups attending breast clinics.[7-12] When the breasts were squeezed to obtain fluid for cytologic examination, the figure rose to 47.8% in two series of 5,023 women.[13-17] Nipple secretion was found in only 0.83% of 9.467 women attending gynecologic clinic by Nyirjesy[15] and Vetter.[16] Friedman and Goldfien,[17] purposely milking the breasts, reported secretion in 12.3% of women of child-bearing age and in none of 114 nulligravida. Gardelund[18] noted discharge in 16% of nulligravida. Our figures reveal a precipitous decline in nipple discharge after the menopause. Although more

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common in women who had borne children, it was present in an appreciable number of nullipara in each age group. In the obstetric literature, there is no mention of secretion when the breasts were squeezed. In our small series, its frequency increased as pregnancy advanced to 89.6% in the third trimester. Five patients with a mean prolactin level of 30.1 ng/mL noted the onset of breast discharge at their first menstrual period. Three nullipara gave a history of galactorrhea in siblings.

Pathogenesis of nipple discharge

As the breast is a gland without a feedback mechanism, prolonged secretory responses may follow short, often unrecognized surges in circulating prolactin. In this series, the serum prolactin level was above normal in 25.0% of 587 patients with nipple secretion, a figure equivalent to the 25.8% Molitch and Reichlin[19] collected in 163 cases.

L'Hermite claimed "... in most cases of such isolated galactorrhea, one can usually detect in the past history of the patient a physiological, pathological, or pharmaceutical event that has or can have induced some hyperprolactinemia of variable duration." In our 587 ambulatory patients, a cause was presumed in only 57.2%, compared with the 59% reported by Kleinberg[21] in his 235 hospital cases.

The most common physiologic factors that may raise the serum prolactin in women are pregnancy, nursing or breast stimulation, sexual intercourse, and stress. Any one may potentiate other subliminal causes, eg, small doses of psychotropic drugs or infrequent use of oral contraceptives. This is particularly true for the single most common reason for nipple discharge, prolonged lactation, which was responsible for 29.1% of our cases. Spontaneous breast secretion usually disappears within three weeks after an infant is weaned. When the breasts are squeezed, secretion may be found much later. Buchman and Peake reported a milky secretion in 26% of 50 women at least two years after weaning. Table III indicates the correlation between nipple discharge and the interval from the last full-term pregnancy or weaning in a number of our patients for whom complete data were available. One woman traced her secretion of 29 years' duration back to her last pregnancy. Kleinberg[21] attributed a third of his cases of galactorrhea to this cause.

Iatrogenic administration of drugs was responsible for 12.6% of all cases of nipple discharge. In the 15 cases due to psychotropic drugs, the mean prolactin level was 32.5 ng/mL, with five above normal, while the mean for 46 cases due to antihypertensive medication was only 13.2 ng/mL, with two above normal. Antihypertensive medication was the major cause of discharge in patients past the age of 50 years (62.5% of 40 cases).

There is no unanimity of opinion as to how hyperprolactinemia depresses the gonads. Hyperprolactinemia was reported in 33.6% of 639 collected cases of secondary amenorrhea of more than six months' duration and galactorrhea in 22.8% of 404 similar cases.[22-28] Amenorhea of this duration was associated with nipple discharge in 15 of our cases. A third of them had serum prolactin levels above normal (3 due to pituitary adenoma, 1 to polycystic ovaries, and 1 to psychotropic drugs). Fifteen others had amenorrhea for either a shorter period or for recurrent bouts. Four of them had elevated prolactin levels (1 due to pituitary adenoma, 1 to polycystic ovaries, and 2 idiopathic). Several syndromes embracing these two symptoms have been described: Chiari-Frommel,[29,30] appearing after pregnancy; one described by Ahumada, Argonz, and del Castillo,[31,32] unrelated to pregnancy; and Forbes-Albright,[33] due to a pituitary adenoma. Actually, there is a continuum of disorders with not only amenorrhea and breast secretion, but often other endocrine stigmata including anovulatory menses, sterility, hirsutism, acne, obesity, and loss of libido. We share Bohnet's[34] opinion that these eponyms should be discarded and replaced by "anovulatory syndromes with breast discharge or hyperprolactinemia, or both."

Most pituitary tumors that affect the production of prolactin are composed of specific lactomorphs, and active secretion of prolactin may be expected in over 60% of all pituitary tumors.[21] Tumors of other types could conceivably impair the delivery of prolactin inhibitory hormone by distorting the pituitary stalk. Early symptoms in the course of a prolactinoma are breast secretion and amenorrhea due to the

TABLE I. Frequency of Nipple Discharge Elicited in an Asymptomatic, Ambulatory Female Population

Age, yr	Nulligravida	(%)	Gravida, Nullipara	(%)	Gravida, Para	(%)
16–19	4/29	13.8	0/5	0.0	0/1	0.0
20–29	12/93	12.9	7/21	33.3	32/99	32.3
30–39	4/31	12.9	8/17	47.1	75/278	26.0
40–49	7/48	14.6	6/19	31.6	75/463	16.0
50–59	2/91	2.2	4/14	28.6	19/534	3.5
60–69	4/90	4.4	1/35	2.9	5/453	1.1
70 and older	1/94	1.1	0/22	0.0	4/248	1.6
TOTALS	34/476	7.1	26/133	19.5	210/2,076	10.1

TABLE II. Conditions Associated With Nipple Discharge

Reported Conditions	Cases in This Series	No. With prolactins > 30 ng/mL
I. Intrinsic breast lesions		
Benign nonneoplastic	27	11
Benign neoplasm	5	0
Malignant tumors		
II. Lesions of sella turcica		
Pituitary adenomas	13	13
Angiosarcoma		
Polyglandular, including hyperparathyroidism		
Empty sella syndrome	4	4
Pituitary necrosis		
III. Suprasellar lesions		
Skull trauma, concussion	2	1
Arteriovenous malformation, brain hemorrhage	1	1
Thalamic hemorrhage	1	1
Pituitary stalk section		
Craniopharyngioma		
Postpneumoencephalography		
Tumor of hypothalamus		
Pinealoma, pineal psammorsarcoma		
Parasellar meningioma		
Pseudotumor cerebri		
Cerebral histiocytosis		
Cerebral sarcoidosis		
Schüller-Christian-Hand syndrome		
Encephalitis		
Luetic leptomeningitis		
Neuraxis irradiation		
IV. Thoracic wall lesions		
Chronic dermatitis	2	1
Herpes	1	0
Radical mastectomy	1	0
Partial mastectomy	1	0
Mammoplasty	1	0
Axillary hidradenitis, chronic	1	0
Burn	1	1
Thoracoplasty	1	1
Sternotomy	1	0
Thoracic wall operations, lobectomy, pneumonectomy		
Plastic chest-wall flap		
Dermabrasions of breasts and shoulder		
Pleural blastomycosis		
Crutch usage		

hyperprolactinemia. As the tumor enlarges, it may compress residual pituitary tissue to produce other endocrine deficiencies. When the tumor escapes from the sella, it may cause visual field defects and loss of visual acuity through involvement of the optic nerves. Massive suprasellar spread may result in papilledema, third to seventh nerve palsies, anosmia, and even pyramidal tract impairment. The differentiation between a microadenoma, confined to the sella, and hyperprolactinemia due to other causes, such as lactomorph hyperplasia or hypothalamic disease, may be exceedingly difficult, if not impossible. Dynamic biologic tests are of academic interest but carry low specificity. Blackwell et al[35] claimed that a prolactin level above 300 ng/mL was diagnostic of tumor, and those between 100 and 300 ng/mL represented adenomas half the time. But three of L'Hermite's[20] 83 cases of adenoma had a titer below 30 ng/mL. All 12 of our cases had prolactin levels above normal, with a span of 31.0 and 345.1 ng/mL, but in only four did it exceed 100 ng/mL. Another patient, 59 years of age, who had an adenoma removed four years before, demonstrated persistent nipple secretion despite a prolactin level of only 6.2 ng/mL. In our series, radiologic evidence of bony erosion in the sella was relied on for diagnosis. Four patients complained of amenorrhea, one of sterility, and one had typical Cushing's syndrome. The diagnosis in the remaining six was established by prolactin and x-ray studies initiated in patients without complaints but in whom nipple discharge was found. Pituitary adenomas were responsible for 2.2% of all the cases of nipple discharge in our ambulatory population. This figure may be contrasted to 20% in Kleinerg's[21] experience in a large general hospital and 47.5% of 40 cases reported by Gould et al[36] from a clinic that is surgically oriented. An adenoma was found in all three of our cases for whom surgery was recommended.

Ductal hyperplasia, often complicated by polyps,

TABLE II. continued

Reported Conditions	Cases in This Series	No. With prolactins > 30 ng/mL
V. Neurologic disorders		
Syringomyelia		
Empendymoma of thoracic cord		
Tabes		
VI. Ectopic tumors		
Hypernephroma		
Adrenal carcinoma		
Testicular choriocarcinoma		
Bronchogenic carcinoma		
Ovarian dermoid		
VII. Renal failure, chronic	1	1
VIII. Thyorid disorders		
Hyperthyroidism	1	0
Hypothyroidism	1	0
IX. Hepatic dysfunction	1	0
X. Extrapulmonary sarcoidosis	1	0
XI. Drug therapy		
Psychotropic drugs	16	6
Antihypertensive drugs	51	3
Isoniazid	4	1
Phenytoin	1	1
Cimetidine	2	1
Morphine		
Methadone		
Prostaglandin E_2		
Enkephalin		
B-endorphrin		
Licorice		
Theophylline		
Metoclopramide		
XII. Gonads and gonadal steroids		
Estrogen administration	2	0
Oral contraceptives	10	2
Contraceptive withdrawal	3	0
Polycystic ovaries (Stein-Leventhal)	2	1
Ovarian cyst resection	1	1
Progestins		
Menopause		
XIII. Physiologic mechanisms		
Pregnancy	5	5
Persistent lactation	171	44

is the most likely type of benign breast disease to present with nipple discharge. Polyps elsewhere in the body have been known to produce enormous quantities of fluid. The finding of Cole et al[37] of an increased prolactin level in some cases of cystic mastitis has not been confirmed by Sistruk-Ware and coworkers.[38] In our series there were 27 cases of nipple secretion attributed to chronic mastitis, 11 of which had a prolactin level above 30 ng/mL. One may speculate as to whether the hyperprolactinemia incited the mastitis or the breast lesion acted as a chronic chest wall irritant stimulating prolactin secretion. There does not appear to be any relation between prolactin and breast carcinoma.[39]

The character of the breast discharge has interested the general surgeon for its presumed diagnostic

TABLE III. Persistence of Nipple Discharge After Full-Term Pregnancy

Shortest Interval Since Last Pregnancy or Weaning	No. of Patients	Discharge Related to Pregnancy By Patient	(%)	Discharge Found, But Relation to Pregnancy Unknown	(%)	Total With Discharge	(%)
< than 1 yr	40	20	(50)	1	(5.0)	21	(52.5)
1–4 yr	149	31	(20.8)	26	(17.4)	57	(38.3)
5–9 yr	192	27	(14.1)	35	(18.2)	62	(32.2)
10–14 yr	230	14	(6.1)	53	(23.0)	67	(29.1)
≥ 15 yr	730	31	(4.2)	116	(15.8)	147	(20.1)
TOTAL	1,341	123	(9.1)	231	(17.2)	354	(26.3)

value, and was reported in 1,081 collected operative cases.[2,4,5,9,40–42] It was milky in 4.0% and not characteristic of any lesion. In 55.6% of these patients it was bloody or serosanguinous; a quarter of them proved to harbor a malignant tumor. In our series of 1,067 breasts with nipple discharge in an unselected population, it was milky in 55.1%. A bloody discharge was found in six breasts, all due to benign polyps. There were 15 examples of a greenish discharge of unexplained origin. Two cultured specimens were sterile, but all three that were tested for blood were positive. The significance of blood in the discharge has run the gamut from Stowers' conclusion in 1935 "... the surgical procedure of choice for all cases of bleeding or discharge from the nipple is mastectomy"[43] to Goldberg's opinion in 1981 "... nipple discharge in patients of all ages is almost always of benign origin." [44]

No acceptable explanation for the discharge could be found in 251 women, 42.8% of our cases. In this group, the prolactin level was above normal in 48 patients. Five had prolactin levels above 100 ng/mL, with normal CT scans of the sella turcica.

The course of nipple discharge is unpredictable. Coitus and breast stimulation become less frequent in the older woman, removing two potent physiologic stimuli. No nipple secretion could be obtained in 9.6% of our cases within two years after its discovery. Anovulatory syndromes may resolve spontaneously or under clomiphene or bromocriptine therapy, while others later present as overt pituitary neoplasms after many years of watching.[45] Even the natural history of prolactinomas requires further investigation. The more frequently sellas are surgically explored, the more often are microadenomas found, and the question has been raised as to whether all anovulatory syndromes are due to tumor. Tolis[46] claimed the triad of amenorrhea, galactorrhea, and hyperprolactinemia must be considered evidence of tumor, even in the absence of radiologic signs, and reported four such surgically authenticated cases. Some tumors become self-limiting through infarction. The relation between hyperplasia and neoplasm requires elaboration. Ballooned-out sellas due to hypothyroidism recalcify and return to normal size under thyroid medication,[47] and a similar reversal has been reported for pituitary adenomas treated with bromocriptine.[48] Bromocriptine controls the symptoms and restricts the growth of most prolactinomas, but it is unknown whether or not such therapy can be maintained indefinitely.

A practical approach to nonpregnant women with nipple discharge is needed. Before the menopause, it is a common disorder but is never profuse enough to deplete body calcium or magnesium. It represents a significant physical finding in a patient with other endocrine complaints, particularly amenorrhea or loss of libido. For them, both a serum prolactin test and a scan of the sella are necessary guides to therapy. In the asymptomatic patient, two factors enter: cost-effectiveness of the special tests and the philosophy of the physician. The chance of there being a pituitary microadenoma is less than one in 1,000 and even lower if there is a reasonable explanation for the discharge, such as persistent lactation or oral contraceptive use. A nonsanguinous discharge from one nipple carries the same significance as if it were bilateral. Bleeding from the nipple is a marker of intrinsic disease. However, there is a suggestive mammogram or a palpable mass, it is usually due to a benign intraductal polyp.

Summary

Frequency and pathogenesis of nipple discharge in an ambulatory population is described. Recommendations for further study of this finding are offered.

Acknowledgment. We wish to acknowledge the kind assistance of the library of Beth Israel Hospital, New York City.

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The following are abstracts of the five winning papers presented at the 36th Postgraduate Assembly in New York City. They were judged on their scientific merit, originality, clinical applicability, and technique of presentation. For editorial comment, see page 921.

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Indomethacin Improvement of Septic Acute Respiratory Failure in Porcine Model

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The effects of indomethacin, a prostaglandin synthesis blocker, were tested in a porcine model of septic acute respiratory failure (ARF) produced by continuous infusion of live *Pseudomonas aeruginosa.* Control groups received either indomethacin boluses (2 mg/kg) intravenously at 20 and 210 minutes or *P aeruginosa* infusion (2×10^8 CFU/20 kg/min). The treatment group received both continuous *P aeruginosa* infusion and indomethacin. Indomethacin alone transiently but significantly decreased cardiac indices, heart rate, and $PaCO_2$. With *P aeruginosa* infusion, significant pulmonary hypertension, hypoxemia, increased intrapulmonary shunt fraction, and systematic hypotension occurred. Indomethacin blocked or reversed these changes and doubled survival in this porcine model of septic ARF.

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Influence of $P\bar{v}O_2$ on Blood Flow to Atelectatic Lung

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The effects of high or low $P\bar{v}O_2$ (mixed venous oxygen pressure) on blood flow to atelectatic lung were studied at normal and low cardiac outputs using total extracorporeal veno-venous bypass in six pentobarbital-anesthetized, mechanically ventilated dogs with left lung atelectasis. Aortic and left pulmonary artery flows, airway, left atrial, central venous, pulmonary and systemic arterial pressure; arterial and venous blood gases; and hemoglobins were measured. Shunt percent ($\dot{Q}_S/\dot{Q}_T$%, measured by blood gases) and left lung blood flow percent ($\dot{Q}_L$%, measured by electromagnetic flow probes) varied directly with $P\bar{v}O_2$ at both levels of cardiac output. Approximately 50% of blood flow was diverted away from atelectatic lung when $P\bar{v}O_2$ was 20 to 30 mm Hg. With high $P\bar{v}O_2$, diversion of blood flow away from atelectatic lung did not occur and mean $\dot{Q}_L$% (40%) was nearly the flow expected for normoxic ventilated left lung. A 40% reduction in cardiac output significantly decreased transmural pulmonary artery pressure, but did not affect PaO_2, $\dot{Q}_S/\dot{Q}_T$% or $\dot{Q}_L$%. These data suggest that the role of mechanical factors in reducing blood flow to atelectatic lung in the open chest is small. Therefore, the mechanism of blood flow reduction to atelectatic lung is hypoxic pulmonary vasoconstriction determined by $P\bar{v}O_2$.

■

This work was supported in part by Research Project Grant GM 29628 from the National Institutes General Medical Sciences.

Pulmonary Pressure and Flow During Atelectasis

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The purpose of this study was to measure the time course, direction, and magnitude of the hypoxic pulmonary vasoconstriction (HPV) response to regional atelectasis.

Six dogs were anesthetized with pentobarbital and paralyzed with pancuronium. Each lung was ventilated separately with a dual-piston ventilator through a left Robertshaw endobronchial tube.

Regional blood flow was measured with electromagnetic flow probes placed around the ascending aorta and left pulmonary artery. Pulmonary arterial, left atrial, and systemic arterial pressures were measured via indwelling catheters. Alveolar oxygen tension, pulmonary perfusion pressure ($\overline{\text{PAP-LAP}}$) and percent venous admixture were calculated. The right lung was continuously ventilated with 100% O_2 while the left lung was either ventilated with 100% O_2 (control), unventilated (4 hours of atelectasis), or ventilated for 15 min with a gas mixture containing 4% O_2, 3% CO_2, 93% N_2 (hypoxia).

Left lung atelectasis resulted in a reduction of the percent left lung blood flow from 42.8 ± 4.3% (mean ± SE) during the control period to 24.8 ± 7.1% at 15 min and to 11.7% at 60 min which persisted for the four-hour period.

Pulmonary perfusion pressure was increased from the control value of 7.9 ± 0.8 mm Hg to 11.0 ± 0.8 mm Hg at 15 min of atelectasis and did not change further during the four-hour period.

In this model, the response to acute atelectasis is a regional increase in pulmonary vascular resistance which develops quickly (15 min), is maximal by 60 min, and is maintained. As a result, there is a sustained 75% diversion of blood flow from the atelectatic to normoxic lung and a 30% increase of pulmonary perfusion pressure.

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This work was supported in part by Research Project Grant GM 29628 from the National Institutes General Medical Sciences.

ED$_{50}$ of Alfentanil for Induction of Anesthesia in Unpremedicated Young Adults

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This study determined the ED$_{50}$ and ED$_{90}$ (effective dose at 50 and 90 min) of alfentanil for unconsciousness and anesthesia. A bolus of alfentanil was given to 28 healthy unpremedicated adults undergoing gynecologic or orthopedic procedures in one of four dosages: 100, 150, 200, or 250 μg/kg. Three indicators of induction were assessed 90 sec later: eyelid reflex, response to verbal commands to breathe, and response to placement of a nasopharyngeal airway. Succinylcholine, given at 90 sec, was followed by tracheal intubation one minute later.

From probit analysis, the ED$_{50}$ and ED$_{90}$ for loss of voice response was 92 and 111 μg/kg, respectively; for loss of nasopharyngeal airway response, 111 and 169 μg/kg; and for loss of eyelid reflex, 115 and 382 μg/kg. A high incidence of chest wall rigidity (75%) and movements of the limbs (54%) or eyes (25%) was seen. There was a significant increase in heart rate 90 sec after induction prior to stimulation. There were significant increases in heart rate (21%) and systolic blood pressure (10%) from control to the peak value following intubation; these changes were not dose-dependent. Naloxone was required in 36% of patients for end-tidal PCO_2 greater than 48 mm Hg at emergence from anesthesia; no patient required additional naloxone. Nausea or vomiting occurred in 39% of all subjects. Two patients had recall for placement of the nasopharyngeal airways.

We conclude that alfentanil is an anesthetic, and its ED$_{50}$ (corresponding to maximum allowable concentration of inhalational agents) is 111 μg/kg. The sympathetic response to laryngoscopy and intubation was blunted after doses that allowed for extubation as early as 51 min after induction.

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Can We Trust the Direct Radial Artery Pressure Immediately Following Cardiopulmonary Bypass?

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Arterial blood pressure is an important parameter for patient management following cardiopulmonary bypass (CPB). Direct radial artery pressure (RP) is generally assumed to reflect systemic pressure. This assumption may be incorrect. We noticed a change in the usual relation between RP and central aortic pressure (AP) following CPB. Systolic RP is normally higher than systolic AP, but this relationship is altered following CPB. The incidence, magnitude, duration, and possible causes of this discrepancy were studied in 25 patients. Our data are consistent with the hypothesis that lowered RP at the wrist results from diversion of flow to a vasodilated forearm vascular bed. We cannot rule out concurrent vasoconstriction of the radial artery. But hand temperature (measured in eight patients) rose more rapidly than forearm temperature during rewarming, suggesting high radial artery flow. The observed forearm vasodilation is related temporally to the temperature increase during rewarming; a causal relation is unproved but suspected. We recommend direct measurement of AP following CPB whenever RP is low enough that treatment is contemplated, since AP may in fact be adequate. The unnecessary use of inotropic drugs may thus be avoided.

■

Alcohol Use and Alcoholism in Adolescence

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Over the years, notably more recently, survey statistics have provided extensive information about the numbers of adolescents who drink, how much they drink, and where they drink. What remains less clear is why some choose to drink and some choose not to, and why alcohol use seems to lead to alcoholism for some adolescents but not for others. Reports of clinical observations of teenage alcoholics are particularly sparse.

Prevalence

Recent findings from a national probability survey of students in grades ten through 12 reveal that alcohol use among adolescents is widespread, routine, and considerable.[1] This 1978 survey conducted by the Research Triangle Institute (RTI) for the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the National Institute on Drug Abuse (NIDA) replicated a 1974 RTI national survey of drinking practices among students in grades seven through nine as well as those in grades ten through 12.[2] During the period from 1965 to 1975 the quantity of alcohol consumed by youngsters increased substantially. The study suggests that consumption has stabilized since 1975.

The 1974 survey estimated that more than half the seventh graders had taken at least one drink during the previous year.[2] Both the 1974 and 1978 surveys[1,2] reported the consumption of alcohol by students in grades ten through 12 to be approximately as follows: 25% were abstainers who either did not drink at all or drank less than once a year; another 25% were considered infrequent to moderate drinkers, drinking one to less than four times a month and no more than four drinks per occasion; 17% were categorized as moderate drinkers defined as either consuming one drink a week or two or three drinks per three or four times a month, or five or more drinks once a month; almost 32% were considered moderate to heavier drinkers, consuming two to five drinks at least once a week. NIAAA estimated that 19% of adolescents (3.3 million), 14 to 17 years old, were "problem drinkers." A survey of adolescent drinking in New York State offered similiar statistics: alcohol use by students in grades seven through 12 was reported to be over 80%.[3]

It has been suggested that these survey statistics are a conservative estimate of prevalence of alcohol use and seriousness of the ensuing problems, since the surveys included only youngsters then attending school; they did not consider dropouts, a population that could well have had a high proportion of problems relating to alcohol use.[4] In addition, these surveys consisted of self-report data which have often proved to be discrepant from actual behavior.[5] For example, estimates of consumption derived from self-report surveys are often about half the estimates based on sales statistics.[6]

More boys than girls drink.[2] Although the patterns of both quantity and frequency of use for males surpass those for females, differences seem to be diminishing.[7] Decreasing sex differences in alcohol use are particularly apparent among college students. A 1977 survey of 7,000 students enrolled in 34 four-year colleges and universities in five New England states showed that 95% of both men and women drank.[8]

The 1978 RTI survey found that alcohol was the most popular drug among school students, with 87% reporting some use; marijuana was the second most popular drug, with 68% reporting some use.[1] The survey data also revealed a high correspondence between the degree of alcohol use and the extent of experience with other psychoactive drugs. Only about 6% of the marijuana users consumed no alcohol. Heavier drinkers were over five times more likely to use marijuana, over 10 times more likely to use stimulants, and over 65 times more likely to use cocaine than were alcohol abstainers.

Drinking settings

Most children have their first drink at home at holiday time or on other special occasions.[9] Although parental rationale for allowing youngsters to drink on these occasions is frequently related to notions of teaching responsible drinking, studies have shown that alcohol use before age 15 correlates with heavy alcohol use and use of other drugs in late adolescence and in the early 20s.[10] Age of initial alcohol use and subsequent preference for other drugs

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have been confirmed by another study whose authors caution that drinking alcoholic beverages by youngsters (early teens and younger) even with parental guidance could be deleterious.[11] In the 1978 RTI survey, over 6% of both boys and girls reported frequent drinking with their families at home.

Although home is the most common setting for a youngster's initial drinking experience, increased quantity of alcohol and frequency of its use most often occur in unsupervised settings.[12] Settings for drinking vary somewhat with age and geographic area, but unsupervised teenage parties are the most favored drinking environment for all grades. The percentage of teenagers who drink at teenage parties drops dramatically when adults are present. Other reported settings, in order of popularity, are: teenage hangouts, sites of school activities, and in cars at night. During school activities, the percentage of teenagers who drink decreases substantially when adult acquaintances are present and can observe their behavior. One quarter of the boys reported drinking while driving around in cars at night. Fewer girls drink in cars, but the difference is not large.

A recent study by the State Division of NIAAA from 1978 to 1981[13] revealed that although fewer than 2% of the licensed drivers in New York State are 18 years old, 7% of alcohol-related accidents and 9% of alcohol-related fatalities involve this age group. This group also has the highest rate of alcohol-related accidents of any age group. In addition, more than 25% of all 18-year-old deaths in the state result from alcohol-related crashes. These tragic statistics are similar to national statistics on drinking age and alcohol-related accidents and fatalities. It is believed that the recent raising of the New York State drinking age to 19 will reduce crashes involving 18-year-old drinking drivers by almost one third; that is, about 275 to 300 fewer accidents and 25 to 35 lives are saved annually. A recent study by the University of Michigan Highway Safety Research Institute (HSRI) reported that states that had raised the legal drinking age have shown a 29% decrease in accidents.[14]

Fewer than 10% of the youngsters in the 1978 national survey reported frequent solitary drinking.[2] It could well be that some of this is just experimentation; however, drinking alone is one of the more reliable historical factors in the diagnosis of alcoholism.

Motivational factors

Although there are regional and sociocultural variations in attitudes toward the use of alcoholic beverages, American society tends to view drinking as a normative, social behavior. It is not surprising, then, that learning to drink is considered by our society to be an integral part of growing up. Many earlier surveys have shown that attitudes and behavior of parents in regard to alcohol greatly influence drinking behavior in adolescents.[2,15,16] This literature shows that the abstaining teenager commonly comes from an abstaining home, the moderate drinking teenager from a home of moderate drinking parents, while heavy drinker teenagers most often come from homes with parents who are heavy drinkers. It has also been argued that although parental attitudes and behavior are a strong influence on adolescent use of alcohol, peer use of alcohol is probably the best predictor of drinking behavior.[17] Recently, a more sophisticated study[18] examined parental and peer influence considering that the two types of pressures involved (instructional *v* modeling) could have different effects; adolescents may form different expectations in response to these pressures. This study maintained that pressures, norms, and preferences would vary somewhat with age and perhaps somewhat with sex, race, and class. It indicated that adolescent drinking behavior parallels the prevalent pattern of adolescent behavior—compliance in early teens, rebelliousness during midteens, and a return to more conforming behavior in late adolescence. Young teenagers respond directly to parental instructions about drinking; during midteens they are influenced more by peer behavior, and by late teens they start to develop their own expectations about drinking with some accommodation of both parental and peer instructional and modeling pressures. The strongest influence, however, was found to be the individual's own enjoyment or dislike of drinking. Relevant to this finding, other researchers studied the development of alcohol-related expectancies in adolescents, aged 12 to 19.[19] They found that those older adolescents who drank more and drank more frequently had more specific expectations of enhanced sex, increased personal power, and tension reduction; lighter drinkers had more global expectations of increased pleasure. Each of these expectations was also seen in younger adolescents despite less drinking experience. It appears, then, that certain adolescents value alcohol for its "medicinal" qualities whether or not they have used alcohol extensively. It is unclear how these expectancies came to be established. The following studies, however, present evidence that can be utilized to formulate hypotheses about these differences in expectancies.

Individuals have been found to differ in the mode by which they perceive and react to stimuli.[20] Three modes have been identified: the augmenter, the reducer, and the moderator. The augmenter perceives and reacts to stimuli as if it were more than it is (louder, brighter, etc); the reducer perceives and reacts to stimuli as if it were less than it is (quieter, dimmer, etc), and the moderator perceives and reacts to a stimulus as it actually is. These modes have been measured by a tactile kinesthetic method and by the cortical-evoked brain potential.[20] The incidence of stimulus augmentation is higher among alcoholics, and alcohol has been demonstrated to reduce the augmenting tendency. In fact, an elevated incidence of stimulus augmentation has been demonstrated recently among 10- to 12-year-old children of alcoholic fathers.[21] Since such youngsters possess a familial/genetic predisposition to the later development of alcoholism, the observation of a premorbid (before the first drink) defect might hold great import in understanding the etiology of this illness. It is conceivable that such a perceptual problem could predispose an adolescent to seek a medicinal (ethanol) answer for relief.

Of course not all augmenters are alcoholics, nor will they become alcoholics. Other physiologic as well as psychologic and sociocultural factors (although currently unclear) are involved. Relevant to psychologic factors is a study of a large sample of 11th graders[22]; those students who used tobacco, alcohol or other drugs scored significantly higher on Srole's anomie scale than nonusers.

These feelings of personal disorganization, rootlessness, and alienation originate apparently in the parent-child relationship. Although most studies, particularly those that use survey methods, provide sparse information on the quality of relationships among family members, some research has indicated that frequent, heavier drinkers do not feel very close to their families.[23,24] Mother is more likely perceived as being unwilling or unable to provide structure and the father more likely to be perceived as rejecting and distant. Similarly, another study found that children with a close and warm relationship with their fathers or mothers were less likely to be frequent drinkers than were those children who had a less close relationship.[25] In addition, parental drinking behavior was shown to influence children's drinking patterns, with father's influence being especially strong.

Paternal influence could well stem from the perception of father as more instrumental than mother (with mother preceived as more expressive than father). Fathers are still commonly perceived in our society as more powerful and more preoccupied with accomplishment, although rigid and narrow definitions of sex roles have eased and expanded in recent years. Since adolescence is a crucial time of striving for autonomy and independence, identification with father's instrumental position is not surprising. If and how the father drinks and how he might use alcohol to cope with life-stress will convey a compelling message to the teenager—either one needs or does not need alcohol to be "grown-up." The message that alcohol is a facilitator of and reward for instrumental behavior is ubiquitously reinforced by the licensed beverage industry through newspapers, magazines, and television advertising, as well as by posters in ball parks and football stadiums.

An alcoholic woman patient recalled her education about drinking: "My father cautioned me about drinking when, as a teenager, I started going to dances at the country club. He told me not to drink champagne or any sweet mixed drinks because they would go down too easily and I might drink too much. He suggested that I drink Scotch whisky and water so that I would sip slower. Although that sounds like reasonable advice, I realize now that what he didn't mention was that I didn't have to drink at all."

Profile of the adolescent with alcoholism

Due to the familial/genetic component of alcoholism,[26] adolescents who have any relative (first or second degree) who is alcoholic have a higher risk for developing alcoholism, children of alcoholic parent(s) being at particularly high risk. In addition to the hereditary factor, children of alcoholics often express feelings of parental rejection and ensuing conflicts of dependency that are similar to childhood recollections of alcoholics themselves.[27] Presently, there is no completely adequate explanation of why any individual becomes alcoholic, or why one child of an alcoholic (or with an alcoholic relative) becomes alcoholic and another does not. As has been previously mentioned, stimulus augmenting appears to be one neuropsychologic factor that may be predisposing to the disease. Other physiologic factors could well be involved. Furthermore, as inferred from studies (recently corroborated by Gitlow SE, and Hennecke L, in *The Mosaic Theory of the Etiology of Alcoholism*, to be published) of heavy, frequent-drinking teenagers cited here, and as observed in alcoholic patients by the authors, problematic identification with the parent of the same sex represents the most likely primary psychodynamic factor in this illness.[28]

Personality characteristics of parents of alcoholics vary widely, but typically include the inability of the same-sex parent to relate to the child in a warm and loving fashion. This parent then is perceived as distant and emotionally inaccessible, depriving the child of an emotionally safe and structured environment. This circumstance may not only result from a labile, irascible, or tyrannic alcoholic or schizoid key (same-sex) parent, but from their early loss through illness, divorce, or death as well. The situation thwarts both identification with this parent and subsequent autonomous strivings, thus leading to identity confusion. Inadequate reflection-back (confirmation) of the youngster's identity, particularly by the same-sex parent during adolescent years, results in identity conflicts that are commonly manifested in problem behavior, either withdrawal and drinking alone or drinking with acting out (delinquent) behavior. It has been suggested recently (and corroborated by S. E. Gitlow and L. Hennecke in their coming publication, *The Mosaic Theory of the Etiology of Alcoholism*) that alcoholism might result from at least the following triad: (1) a genetic predisposition to stimulus augmentation (the resultant perceptual circumstance being that of greater need for relief, ie, appetite), (2) failure to identify with the parent of the same sex leading to anomie and isolation, and (3) a social milieu in which alcohol ingestion is possible or even encouraged. This mosaic theory of the etiology of alcoholism underscores a number of potential prophylactic interventions that might be worthy of experimental evaluation.

The NIAAA 1978 survey[1] revealed that although only 1% of the respondents reported serious problems related to alcohol use, 23% reported driving after a considerable amount of alcohol; 17% had experienced problems with friends about their drinking and 10% had experienced criticism from the person they were dating.

Episodic, heavy drinking is not in itself a reliable predictor of the disease of alcoholism. As with adult alcoholism, however, adolescent alcoholism is characterized by the repetitive ingestion of any sedative drug, ethanol representing but one of this group, in such a way as to result in interference with some aspect of the person's life, such as health, family relationships, other personal relationships, and work, school or other required societal adaptations.[29] The key aspect of the definition rests in the recurrent return to the use of alcohol (or other sedative) despite the individual's definitive best interest. A number of questions have been raised concerning the applicability of this definition to alcoholism of youth.

The first issue has to do with the relative absence of manifestations of interference with health among the youth. Since many diseases vary in their expression with the age of the patient, and many drugs elicit differing degrees of toxicity as related to the age of the patient, such a circumstance should come as no surprise. In fact, it is well known that tolerance to soporific drugs diminishes with advancing age. One should not expect ethanol to elicit a withdrawal syndrome (ie, evidence of physical dependence) in the young of equal severity to that found in the older adult.

The second issue deals with the need of some observers for the adolescent with an alcoholic problem to demonstrate progress to a severely dependent alcoholic a decade or so later. It is indeed unfortunate that an error was made some years ago in applying the term "progressive" to the definition of alcoholism as opposed to its proper application to the description of the illness. No disease can be defined as progressive, although progression may be a common concomitant. Neuroblastoma, commonly progressive and deadly when arising after 2 years of age, not infrequently remits totally when treated in the 1-year-old. Lacking specific biochemical etiologic insight, the inclusion of the arbitrary term "progressive" in a definition could lead to such ridiculous self-fulfillment that the advent of a new cure might elicit naught but a nosologic dilemma. When a 17-year-old drives while drinking, destroys a car on one weekend, kills his best friend in a similar manner a few months later, and persists in alienating his intimates by his drinking behaviour thereafter, that is alcoholism, whether or not he reveals severe current ethanol dependency or progresses to such a state in the near future.

Alcoholics Anonymous offers a 12-question quiz designed to help the adolescent decide if drinking is becoming a problem. Answering "yes" to any one of the following questions is considered an indicator of possible serious problems.

1. Do you drink because you have problems? To face up to stressful situations?
2. Do you drink when you get mad at other people, your friends or your parents?
3. Do you often prefer to drink alone, rather than with others?
4. Are your grades starting to slip? Are you goofing off at the job?
5. Do you ever try to stop drinking or drink less and fail?
6. Have you begun to drink in the morning before school or work?
7. Do you gulp your drinks as if to satisfy a great thirst?
8. Do you ever have a loss of memory due to your drinking?
9. Do you avoid leveling with others about your drinking?
10. Do you ever get in trouble when you are drinking?
11. Do you often get drunk when you drink, even when you do not mean to?
12. Do you think it is cool to be able to hold your liquor?

Comment

A subtle but tragic aspect of drug use during adolescence is that it prevents the youngster from maturing emotionally. When drugs become the means of easing difficult situations—academic, social, or interpersonal—the necessity for learning healthy coping skills is removed. Effects may not be felt until adulthood, when establishing close personal relationships then often proves difficult, leaving the individual emotionally isolated. Alcohol is the number one youth drug problem today. Research has shown that children as young as 6 or 7 years old have already developed attitudes about alcohol and have some knowledge about it and its use.[30,31] These years, then, would be the appropriate and potentially beneficial time to introduce alcohol education. It must be emphasized, however, that the development of a value system, sense of self esteem, and coping skills are derived largely through the precept of parental attitude, belief, and especially behavior. The act of teaching a child how to use any social drug carries with it the unspoken message that the teacher (parent) accepts its use as important. The carnage among our youth, to which this review has referred, demands a change in this message to our children and adolescents. An alternate and healthier life style must be projected. Our society is in serious need of information relative to detailed mechanisms whereby parents, school, and religious organizations may achieve such an aim.

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Beta Blocking Agents in the Treatment of Hypertension

MARVIN MOSER, MD

Treatment with beta blocking agents has become established as an effective approach to the management of hypertensive patients. Although some investigators suggest the use of these agents as step-one therapy, the Joint National Committee Reports on Detection, Evaluation and Treatment recommend diuretics as initial treatment in the majority of patients.[1,2] Previous publications have summarized reasons for preferring the intermediate or long-acting thiazide diuretics as initial treatment.[3-5] These drugs are as effective as beta blocking agents or any other adrenergic inhibiting drugs as monotherapy in as high or higher percentage of cases, and in addition, are relatively inexpensive, effective on a once-a-day basis, and over time have produced relatively few side effects. A careful review of the data from the Multiple Risk Factor Intervention Trial (MRFIT)[6] and the Hypertension Detection and Follow-up Program[7] provides evidence that the use of diuretics in lowering blood pressure reduces morbidity and mortality. Confusion relating to a small subset of patients in the MRFIT cohort has been clarified in a recent editorial.[8]

Although the metabolic derangements that result from thiazide diuretics can be significant in some patients, in general these medications are well tolerated and most of the side effects can be managed. For example, hypokalemia is preventable in most younger patients who supplement their diet with foods high in potassium, and is correctable either by the use of potassium-sparing agents or potassium chloride salt substitutes. In addition, the use of the smallest possible dosage of a diuretic plus a modified low-sodium diet will minimize hypokalemia.[9] Elevation of plasma lipid levels that has been described following administration of thiazide diuretics can be prevented by reducing the intake of fats.[6,10] There are a small number of younger hypertensive patients with a rapid resting pulse rate and wide swings in blood pressure on change in position, and some other patients, such as those with a history of gout, who might appropriately be started on beta blocking agents as monotherapy.

In general, blood pressure responses to propranolol, the prototype for the beta blocking agents that have been used over the past seven to ten years in the United States, have been excellent. Numerous studies, including the Veterans Administration study on propranolol,[11] have demonstrated that this drug, as monotherapy, lowers blood pressure to normotensive levels in approximately 50% of patients. In combination with a diuretic, this nonselective beta blocking agent has produced normotensive levels in approximately 80% of patients, a percentage approximately equal to responses noted after rauwolfia drugs and thiazides[11] and higher than is seen after the use of diuretics and other adrenergic inhibiting drugs.

There are, however, some theoretic disadvantages to a beta blocking agent such as propranolol, which is nonselective and inhibits both types of beta receptors at nerve endings, that is, beta$_1$ and beta$_2$ adrenoreceptors. In an effort to find specific medications that will be more selective in their action or produce fewer side effects, numerous beta blockers have been under study worldwide. At present, six are available in the United States for the management of hypertension: propranolol (Inderal), metoprolol (Lopressor), nadolol (Corgard), timolol (Blocadren), atenolol (Tenormin), and pindolol (Visken).

Effect of beta stimulation

When sympathetic nerve stimulation occurs, beta receptors in the heart, kidney, and smooth muscles (blood vessels and the bronchial system), as well as certain metabolic activities, are activated. Table I summarizes the effect of beta receptor stimulation. It should be remembered, however, that no organ is totally beta$_1$ or beta$_2$ innervated. Effects on the heart, for example, are primarily mediated through beta$_1$ receptors, but the heart probably also contains some beta$_2$ receptors; the response is the result of a predominance of one type of receptor over another in a particular organ.

Table II summarizes the results of beta receptor inhibition. The important effects in the hypertensive patient relate to cardiac and renal beta receptor inhibition, that is, reduction in cardiac rate, contractility, and cardiac output and a reduction in renin release.

The effects of beta receptor inhibition on bronchial smooth muscle and peripheral arterial smooth muscle may be disadvantageous to some patients with hypertension. For example, stimulation of the sympathetic nervous system will result in bronchodilatation. If this is inhibited, a tendency toward bronchospasm might be aggravated. Similarly, stimulation of peripheral arterioles innervated by the beta receptors results in vasodilatation. Blockade or inhibition might allow the unopposed alpha fibers to produce vasoconstriction, certainly not a desired effect, especially in patients with peripheral arterial disease. Metabolic effects can also be inhibited by a beta blocking agent that affects both beta$_1$ and

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TABLE I. Effects of Beta Adrenergic Receptor Stimulation

Site	Effects
Heart	Increase rate and contractility
Lungs	Bronchodilation
Peripheral vessels	Arteriolar vasodilatation
Kidney	Increase renin release
Metabolic	Increase insulin secretion Increase lipolysis Increase glycogenolysis

beta$_2$ receptors. A decrease in insulin secretion may result, for example, and a delayed mobilization of glucose may be noted in a patient with hypoglycemia. If these effects, such as potential bronchoconstriction or vasoconstriction, could be eliminated, this of course would be desirable in the hypertensive patient or the patient with angina pectoris where the primary objective of therapy is to reduce cardiac work and oxygen consumption. Unfortunately, there are no available beta blocking agents that are totally beta$_1$ or beta$_2$ selective; all are capable of blocking both types of receptors when given in sufficient dosages.

The differences in response between a cardioselective beta blocking agent—one that blocks mostly beta$_1$ fibers—and a noncardioselective beta blocking agent have been demonstrated. The injection of adrenalin will usually result in a decrease in vascular resistance (vasodilatation) and an increase in peripheral arterial flow.[12] If adrenalin is given after the administration of a relatively noncardioselective beta blocking agent (propranolol, nadolol, or timolol), some vasoconstriction, with an increased peripheral resistance and a decrease in arterial flow, is noted. If metoprolol or atenolol (primarily beta$_1$ inhibitors or cardioselective beta blocking agents) are used, a lesser effect is noted; the *increase* in peripheral flow is, however, still less than when adrenalin is given without a beta blocking agent.

Several hours after the use of a nonselective beta blocking agent in patients with pulmonary disease, forced expiratory volume in the first second (FEV$_1$), a measure of ventilatory function, is decreased.[13] A less significant decrease occurs following the use of small doses of a more selective beta blocking agent. Following the use of isoproteronal, the marked bronchodilatation which is usually noted is blocked significantly by the nonselective beta blocking agents (such as propranolol, timolol, and nadolol) but less significantly by small doses of the beta$_1$ antagonists (atenolol and metoprolol). The cardioselective effects seem to disappear at higher dose levels with these drugs; for example, 200 mg/day metoprolol or 100 mg/day atenolol are no longer significantly cardioselective.

TABLE II. Effects of Beta Receptor Inhibitors

Organ	Beta$_1$	Beta$_2$
Heart	Decrease rate Decrease contractility	
Kidney	Decrease renin	Decrease renin
Lungs		Bronchospasm
Arterioles		Vasoconstriction
Pancreas		Decrease insulin secretion
Liver		Decrease glycogenolysis

Glucose tolerance is less impaired and recovery time from insulin induced hypoglycemia is less prolonged when a selective beta$_1$ blocking agent is used (mobilization of glucose from the peripheral tissues and the liver is less affected than following the use of a nonselective beta blocking agent).

From a theoretic point of view, therefore, a drug which primarily inhibits beta$_1$ receptors should be a more desirable agent for use in hypertension or angina; some of the potential side effects should be less severe.

Table III summarizes other properties of beta blocking drugs. Some of these may be of clinical significance but others are not. For example: (1) the membrane stabilizing effect, which is similar to a quinidine effect, is of little significance when the usual therapeutic doses are given in clinical practice; (2) intrinsic sympathomimetic activity is a property of some beta blocking agents, specifically pindolol. This drug is a beta receptor inhibitor but also has some sympathetic agonist activity; pulse rate is not decreased at rest but blood pressure and pulse response is blunted after exercise. This writer's experience with pindolol has indicated that this drug is of similar potency as an antihypertensive agent as the other beta blocking agents but that pulse rate is not decreased during its use. It may have some use in specific patients with pretreatment resting bradycardia (<55 beats/min).[14]

A third point, whether or not a beta blocking agent is lipophilic, may be of some importance. Atenolol and nadolol are only slightly lipophilic and do not penetrate to a great degree the so-called blood-brain barrier, the capillary membrane that allows certain substances to appear in significant concentrations in the brain.[15] These drugs are eliminated by the kidney and are generally longer-acting than the other more lipophilic drugs that appear in high concentrations in the brain. Whether this is of clinical significance has not been carefully evaluated. Our impression is that some patients who have developed central nervous system symptoms, such as dizziness, insomnia, and nightmares from the use of other beta blocking drugs have responded without these symptoms when nadolol or atenolol has been used.

A fourth consideration is that most of the beta blocking agents available in the United States are metabolized by the liver. This may account for the difficulties in titrating some of these drugs. For example, if microsomal enzyme activity in the liver is at a low level, some patients may respond to as little as 40 mg of propranolol twice a day. In others, where this activity is pronounced, the patient may require

TABLE III. Presently Available Beta Blocking Agents

Generic Name	Trade Name	Dosage Mg/Day	Method	Cardio-Selectivity	Partial Agonist Activity (ISA)	Lipid Soluble	Membrane Stabilizing Activity	Primary Site of Excretion or Metabolism
Propranolol	Inderal	80–480	bid	0	0	++	++	L
Metoprolol	Lopressor	50–200	bid	+	±	+	+	L
Nadolol	Corgard	40–240	qd	0	0	0	0	K
Timolol	Blocadren	20–60	bid	0	0	+	0	L
Atenolol	Tenormin	50–100	qd	+	0	0	0	K
Pindolol	Visken	20–60	bid	0	++	+	+	L

L = liver; K = kidney.

as much as 320 or 480 mg of propranolol to achieve evidence of beta blockage (such as slowing of pulse rate). Most agents that are rapidly metabolized by the liver show this so-called "first pass" phenomenon.

Atenolol or nadolol, which are eliminated by the kidney, do not share this effect and dosage may be more easily titrated. These drugs should be used with care, however, in patients with obvious renal disease and dosages should be lowered accordingly. In addition, in some elderly patients where functioning nephrons have decreased as part of the aging process but creatinine or BUN levels may be normal, the drugs should be used with caution because of their primary source of excretion.

Several other beta blocking drugs will probably be approved for use in hypertension and angina during the next year or two. All of these drugs, as well as the presently available ones, produce a similar degree of blood pressure reduction in therapeutic dosages. There is no evidence at present that any beta blocking drug is superior to another in terms of antihypertensive effect. What, then, should be the criteria for a physician when he elects to use a beta blocking agent, and when should these agents be used specifically in the hypertensive patient?

Choice of beta blocking agents

1. If good results, without significant side effects, have been obtained with propranolol and the dosage has been adjusted to a twice-a-day program which is well tolerated by the patient, this drug should be continued, along with any other antihypertensive drug (such as diuretics) that may have to be used. There is no reason at present to change to one of the newer drugs.

2. If a patient is presently being treated with a cardioselective beta blocking agent such as metoprolol, which was started because of side effects from a "noncardioselective" agent, this drug should also be continued. It is possible that at low doses (50 to 100 mg) some patients who had experienced cold extremities, intermittent claudication, or evidence of bronchospasm when a nonselective agent was used, will respond without side effects.

3. If a patient is either unable to adhere to a twice-a-day regimen or has developed central nervous system symptoms, such as insomnia, nightmares, or excessive drowsiness from either propranolol or metaprolol, it might be appropriate to treat the patient with nadolol or atenolol, which are effective on a once-a-day basis and do not appear in significant concentrations in the brain. Atenolol presents the further advantage of being relatively cardioselective.

4. Finally, if a patient has a resting bradycardia and a beta blocking agent is deemed necessary, the use of pindolol might be appropriate (see Table III for suggested dosages).

Cardioprotective actions of beta blocking agents

Numerous studies in the 1960s and 1970s demonstrated that different beta blocking drugs, including propranolol, practolol, and alprenolol, appeared to decrease the number of recurrent myocardial infarctions or sudden death in patients who had experienced one myocardial infarction (secondary prevention).[16,17] Two recent long-term studies with timolol in Norway and propranolol in the United States[18,19] indicate that the incidence of reinfarction and sudden death is decreased when these beta blocking agents were started in patients between the first and fourth week following an infarction and continued for one to two years. No data exist as to how long these drugs should be continued after an infarction. Short-term studies with metoprolol and atenolol have extended these data. It must be remembered when reviewing these important studies that the Hypertension Detection and Follow-up Program,[7] as well as the Australian National Study on Mild Hypertension,[20] demonstrated a definite decrease in deaths from myocardial infarction in hypertensive patients whose blood pressure was lowered to normotensive levels over time, suggesting possible primary prevention of coronary heart disease deaths. Most of these patients did not receive beta blocking drugs but were given diuretics and, in some cases, rauwolfia preparations, alpha methyldopa, etc. A recent paper from the Mayo Clinic also suggests that lowering blood pressure over time will prevent recurrences of myocardial infarctions regardless of the therapy used (diuretics were, however, used in most cases).[21]

Whether or not beta blocking agents should be given within the first few hours of an infarction to reduce infarct size, as suggested by a recent atenolol study, remains to be proved by more definitive observations. At present, I would view these results as experimental since the use of intravenous beta blocking drugs can occasionally produce significant side effects, such as intractable congestive heart failure.

At present, the available beta blocking agents appear to be relatively safe, effective antihypertensive drugs. Most of them can be given on a twice-a-day basis. Several are effective on a once-a-day basis, including, nadolol, metoprolol, and atenolol. Most patients tolerate these drugs well but approximately 10% have had to discontinue therapy because of side effects. These side effects include: (1) central nervous system symptoms; (2) a sense of fatigue which may be related to the chronic reduction in cardiac output; (3) cold extremities, which may be related to the vasoconstrictor effect of beta blockade; (4) impotence, which has been noted with beta blocking drugs, as well as with most other antihypertensive agents; and (5) increasing triglyceride levels, which in my opinion, is not a significant reason to discontinue therapy.

In general, beta blocking drugs are as effective as any of the other adrenergic inhibiting agents and converting enzyme inhibitors or calcium entry blocking agents in the management of hypertension. They are more effective than prazosin, clonidine, or alpha methyldopa when used as monotherapy. In combination with diuretics, they are as effective as reserpine and a diuretic and more effective than alpha methyldopa and a diuretic.

Patients who should be treated with a beta blocking agent if diuretic therapy alone does not reduce blood pressure to normotensive levels include: (1) patients with angina where the use of beta blocking agents has proved to be extremely helpful in reduction of symptoms and possible prevention of infarction and sudden death; (2) patients with ventricular ectopy where the use of beta blocking drugs may conceivably reduce ectopy; (3) patients with migraine headaches and hypertension where the use of beta blocking drugs may also favorably affect the headaches (this also applies to those patients with intention tremor since the use of nonselective beta blocking agents may be helpful in this condition); and (4) patients with hypertension and a previous infarction, although the absolute criteria for starting these patients have not been clearly established. It must be remembered that a significant decrease in deaths from myocardial infarction has also been noted in patients whose blood pressures were lowered without the use of beta blocking drugs.

Beta blocking agents should not be considered in hypertensive patients with chronic pulmonary disease, chronic allergic bronchitis or asthma, or those with significant peripheral arterial disease or insulin-dependent diabetes. These latter patients might not be able to distinguish symptoms of insulin shock because these may be blunted by the use of beta blocking drugs, that is, the usual tachycardia does not occur.

Beta blocking agents are less effective as antihypertensive drugs than are diuretics in black hypertensive patients.[14] This may be partially the result of lower renin levels. Beta blocking agents are also less effective in elderly patients; for example, only 20% to 30% of patients over the age of 60 respond to beta blockers by developing normotensive blood pressure levels, compared to about 60+% of patients 20 to 30 years of age.

All the foregoing points should be considered when selecting a beta blocking agent as initial therapy or as an adjunct to therapy if the patient has not responded to a diuretic.

Summary and conclusions

The availability of beta blocking drugs represents an advance in the therapy of hypertension. These drugs are effective as monotherapy but no more effective in the majority of patients than a diuretic. In some young patients with the so-called hyperkinetic syndrome, they may be used as monotherapy, but in the majority of patients they should remain as second-step agents. In combination with a diuretic, they are as effective as reserpine plus a diuretic but more effective than any of the second-step drugs (alpha methyldopa, clonidine, guanabenz, prazosin) when combined with a diuretic.

The availability of cardioselective drugs, such as metoprolol and atenolol, may make management easier in those patients with preexisting asthma, chronic pulmonary disease, peripheral arterial disease, or significant metabolic derangements such as insulin-dependent diabetes. However, at larger doses cardioselectivity disappears, and these drugs must be used with care.

There may be some advantage to the longer-acting beta blocking agents, such as nadolol, metoprolol, and atenolol, in patients who are unable to adhere to therapy on a twice-a-day basis. A slow-release long-acting propranolol may also be available soon for use as once-a-day therapy.

Finally, there may also be some advantage to using the less lipophilic beta blocking drugs that do not appear in the brain in high concentrations, specifically nadolol and atenolol, although this theoretic advantage has not been proved in a clinical setting.

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Correlation Conferences in Radiology and Pathology

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Editors
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Assistant Professor, Department of Radiology
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Cystic Renal Mass

Case history

Michael E. Berlow, MD: A 45-year-old man came to the Urology Service complaining of persistent urinary frequency and nocturia accompanied by dysuria and right lower quadrant discomfort. There was no gross hematuria. Laboratory examinations revealed a hematocrit of 51.1% and WBC of 18,000 mm^3. Urinalysis indicated one RBC and one WBC per high-power field. Urine culture revealed no growth. Past medical history included two previous episodes of right renal colic due to calculi that passed spontaneously, the last occurring 1½ years earlier. Physical examination was unremarkable, and the patient was afebrile. An intravenous pyelogram was initially performed, followed by renal sonography, computed tomography (CT), angiography, and cyst aspiration.

Beverly A. Spirt, MD: A left posterior oblique view on an intravenous pyelogram (IVP) shows a large round mass which measures 11 cm in diameter, located at the upper pole of the left kidney. The

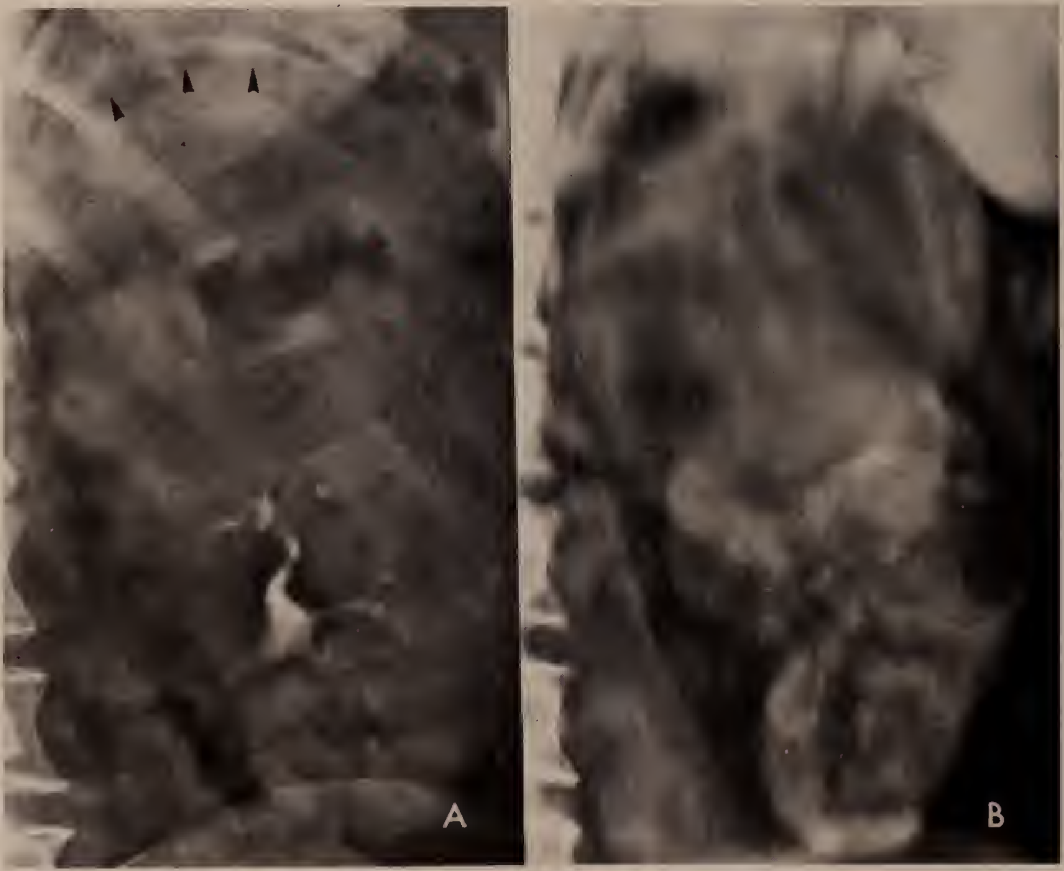


FIGURE 1. Two radiographs on an IVP. (A) Oblique view demonstrates upper-pole low-density mass with thickened wall (arrows). (B) Tomogram.

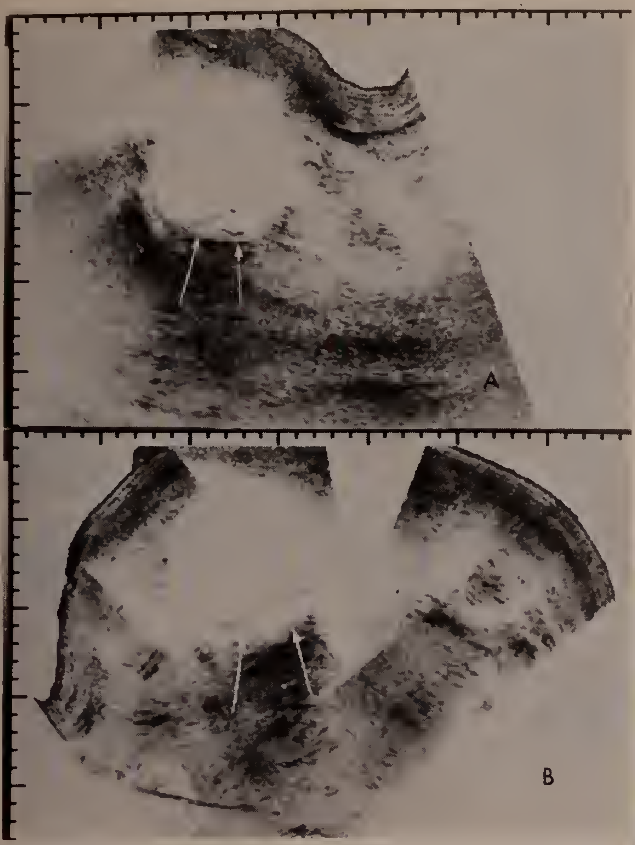


FIGURE 2. Renal sonogram performed in prone position. (A) Longitudinal and (B) Transverse images through predominantly cystic upper pole mass. Scattered internal echoes (arrows) along inner surface of anterior wall are atypical of a purely cystic lesion.

mass appears more radiolucent than the renal parenchyma. The wall of the mass appears irregular and measures up to 3 mm in thickness (Fig 1A, arrows). There is also a 2-cm, radiolucent area within the lateral aspect of the left kidney. A tomogram during the nephrogram phase (Fig 1B) shows the 2-cm left renal lucency, likely a cyst. The thick wall of the large left upper pole mass is not so apparent on the tomogram. There is no sharp "beak" of renal parenchyma surrounding the inferior portion of the mass which protrudes from the kidney, as is often seen with a cyst.

Sonographic examination of the left kidney (Fig 2) shows the upper pole mass to be primarily sonolucent, or cystic. However, there is a collection of solid echoes protruding into the cyst from the anterior wall (arrows).

Computed tomography confirms that the left upper pole mass is of fluid density with a thickened wall (Figs 3, 4). A thick, irregular configuration is seen in the anterior wall of the mass (arrows), corresponding to the echoes seen on sonography. The interface between the mass and the renal parenchyma is not as well defined as one sees with a cyst.

A selective left renal arteriogram (Figs 5, 6) shows the mass to be avascular. A single vessel is seen related to the mass (arrow) but definite tumor vessels are not seen.

Dr. Berlow: Percutaneous aspiration was then performed and over 100 cc of brown, murky fluid withdrawn.

Dr. Spirt: Contrast material was injected into the mass (Fig 7). It did not immediately disperse through the mass, as is seen with a cyst; rather, it spread slowly with an irregular border (arrows).

The thickened wall and the lack of a "beak" sign on IVP, the collection of echoes protruding from the anterior wall on sonography, the thickened wall and irregularity seen on CT, and the irregular dispersal of contrast material following percutaneous puncture are all findings seen with neoplasm.

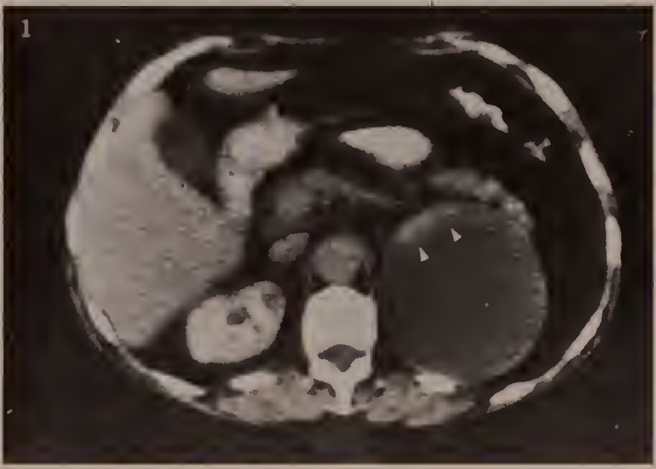
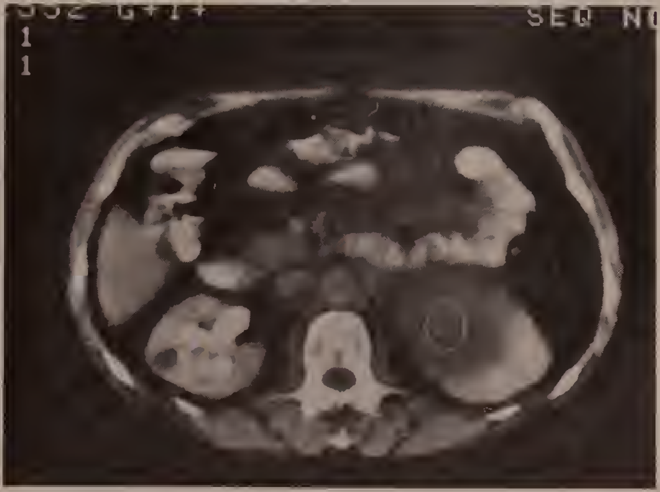


FIGURE 3. CT slice through mass in supine position. Thickened anterior wall (arrows) corresponds to scattered internal echoes on sonogram.

FIGURE 4. CT slice through planes of interface between mass and adjacent renal parenchyma. Inferior slice has poorly defined margin.



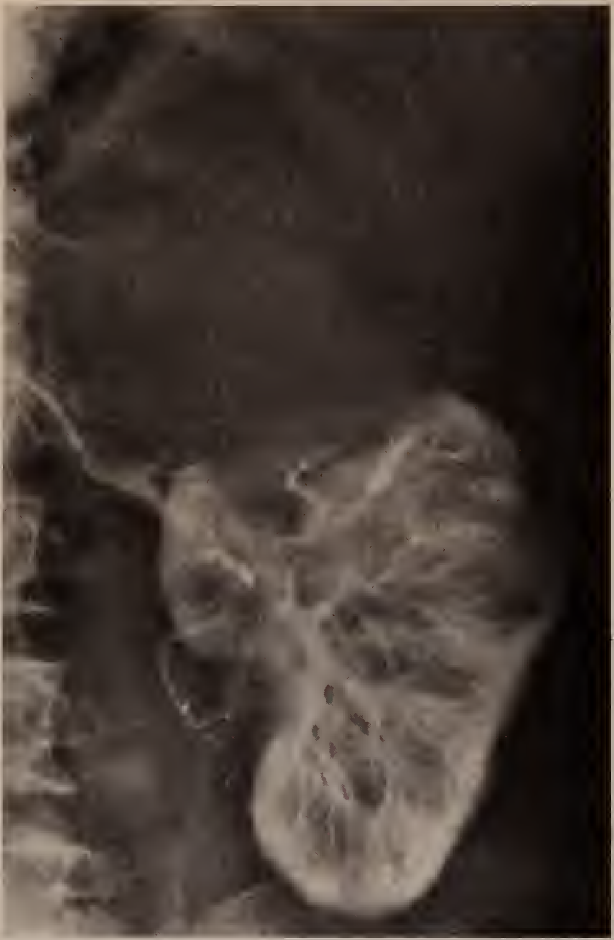


FIGURE 5. Anteroposterior view of selective renal arteriogram.

Although renal carcinoma is usually highly vascular, the lack of tumor vessels on angiography does not preclude the diagnosis of tumor.

Dr. Spirt's Diagnoses

1. Large cystic carcinoma of the right kidney.
2. Bilateral smaller simple cysts.

Pathologic discussion

Bedros Markarian, M.D.: A left radical nephrectomy specimen was submitted for pathologic study. At one pole was an 8 cm × 10 cm × 10 cm cystic mass. The external capsular surface was smooth and it was sharply demarcated from the renal parenchyma. The central portion of the tumor was almost totally necrotic, consisting of soft yellow to gray fragments mixed with a gray muddy fluid. There was a small rim of viable, grossly yellow granular tumor adherent to the inner aspect of the capsule. Microscopically, the tumor consisted of cuboidal cells with a pale cytoplasm that grew in papillary pattern (Fig 8). There were multifocal areas where the tumor extended into the capsule, but

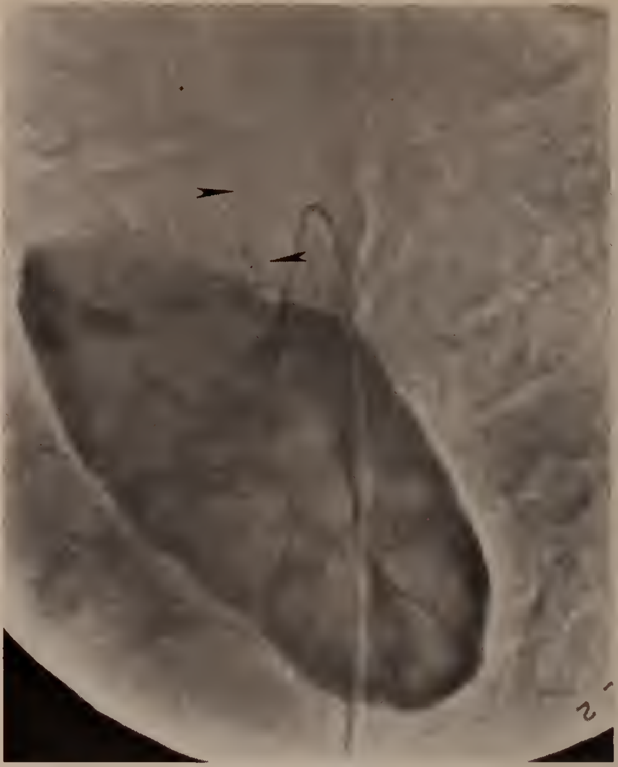


FIGURE 6. Lateral view, selective arteriogram. Single vessel (arrows) related to mass, not specific for tumor vascularity.

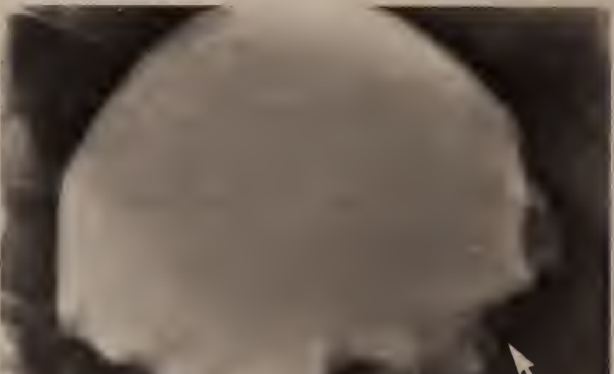


FIGURE 7. Cystogram, AP view. Irregular nodular surface of inferior wall of mass (arrows).

there was no penetration of the tumor into the surrounding perirenal fat. The renal vessels and a lymph node submitted with the specimen were free of tumor. This gross and microscopic appearance is typical of grade I, well-differentiated cystopapillary renal cell adenocarcinoma which has outgrown its blood supply and suffered prominent central necrosis.

Discussion

Dr. Berlow: Benign renal cysts are quite prevalent in adults, having been recorded in up to 50% of autopsy cases.[1] The majority of these lesions are asymptomatic, but occasionally they are recognized as renal masses during a uroradiologic work-up on intravenous pyelography for an unrelated problem. This case exemplifies the usefulness of the new imaging modalities for further characterization of these lesions, enabling one confidently to suggest the presence of malignant disease.

Several possible relationships for the coexistence of renal cyst and tumor within the same kidney have been proposed[2]: (1) widely separated lesions of unrelated origin, (2) origin of a cyst within a neoplasm, (3) origin of a neoplasm within a cyst, and (4) origin of a cyst distal to a neoplasm.

These are all generally regarded as rare, with an occasional cyst present within a neoplasm the most prevalent. Overall, the association of malignant disease with cystic renal masses has been recorded in between 1% and 2.9%[2] of lesions. These are pathologically regarded as necrosis or extreme cystic degeneration of a tumor in which often less than 1% of viable neoplastic tissue remains.

During the last decade, the most significant technologic progress in imaging has been related to sonography, and more recently CT. Experience with these methods has substantiated their usefulness and accuracy in determining the cystic composition of renal masses.[1,3,4] This accuracy is obtained only through application of rigid criteria for the diagnosis of a benign cyst. In most institutions, ultrasound is the method of choice to evaluate a lesion seen on IVP. Benign cysts are recognized by the absence of internal echoes, smooth sharply defined back walls, and the presence of acoustic enhancement distal to the lesion.[5,6] This is regarded as being more than 95% accurate. Most recently, utilizing the rapid scan times of fourth generation CT scanners and thin sections (about 5 mm), several series have indicated the accuracy of CT to be comparable to that of sonography. The results of CT correlate well with percutaneous cyst aspiration diagnosis.[5,7,8] In most institutions, CT would be utilized where the ultrasonographic recording is degraded by obesity, bowel interposition, or overlying ribs. It is also quite valuable in the staging of suspected carcinoma. Benign cysts are sharply demarcated from surrounding parenchyma, have thin smooth walls and homogeneous low density, and often produce a beak-like configuration similar to the interface with normal parenchyma described on nephrotomography.

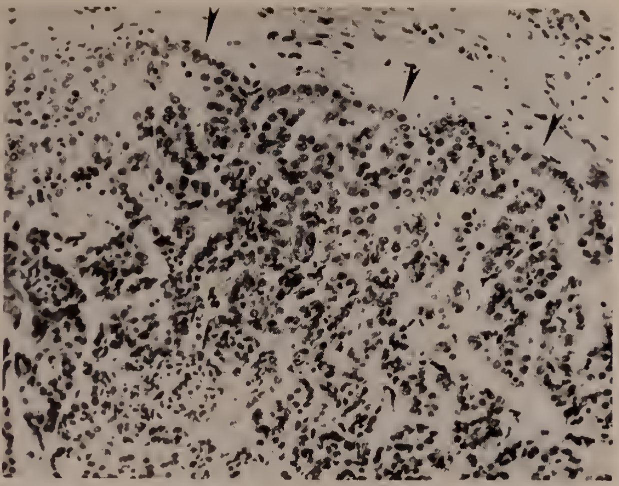


FIGURE 8. Photomicrograph of renal tumor demonstrating cuboidal tumor cells with bland nuclei, lining fibrous capsule (arrows) and growing as papillary projections into cyst lumen (hematoxylin and eosin).

Percutaneous cysts aspiration has been advocated for suspicious cystic lesions. It is most widely performed with sonographic localization, though CT guidance[9] may be used as well. Laboratory analysis and cytologic study of the aspirate is useful but may be nonspecific. A negative cytologic examination does not exclude malignant disease.[10–12] As in the present case, this may be combined with cystography to demonstrate further characteristics of the wall of the lesion, which generally is smooth in benign cysts.

The role of angiography in the evaluation of cystic renal masses has changed with the evolution of ultrasound and computed tomography. Angiography is most specific for tumor if both neovascularity and tumor encasement of vessels is present. Since cystic renal masses tend to be hypovascular, the absence of neovascularity does not rule out the presence of tumor. Furthermore, some vascularity may be seen with hemorrhagic or infected benign cysts.

This case demonstrates an imaging approach to a renal mass. Ultrasound, being noninvasive and lacking ionizing radiation, is the method of choice; however, we believe aspiration and computed tomography have significant value as subsequent examinations.

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From the library . . .

Herrman C: Immunization against measles, abstracted. *NY State J Med* 1915; 15(6): 233–235.

Immunization Against Measles.

Although the mortality from measles has been somewhat reduced, the morbidity remains as high as ever. On several occasions I have stated that this high morbidity could only be distinctly diminished by immunization against this disease. For several years I have had a method in mind, but it was only about two years ago that I gathered courage to test the method. For the sake of convenience I shall divide the discussion of the subject into:

1. Is it worth while?
2. Important facts bearing on the problem.
3. Some theoretical considerations.
4. The method of immunization and its results.

1. From 1900 to 1910 in the registration area of the United States 44,080 deaths from measles were recorded. In 1910, 6,598. In 1913, in New York State, 1,075 deaths were caused by this disease. In New York City, during the ten years from 1903 to 1912, the average number of deaths annually was, from measles 957, scarlet fever 939, whooping cough 393. In 1913, 628 deaths were due to measles, 507 to scarlet fever, and 420 to whooping cough. These figures, however, do not represent the entire mortality, for many patients die of complications and their deaths are recorded as due to these complications. In New York City about 30,000 cases of measles are reported annually, but as many patients have no attending physician and as some physicians fail to report all their cases, a conservative estimate would place the real number at about 60,000. This disease is therefore important on account of the large

Measles Immunization

Dr. Charles Herrman's article, "Immunization Against Measles," appeared in the *Journal*, 68 years ago. It tells us not only what a devastating disease measles was at that time, but also provides us with a reminder that our predecessors possessed empirically derived knowledge about measles maternal antibody protection, and the attenuated forms of the disease that occur in its presence.

Based on this latter observation, Dr. Herrman attempted to infect 40 children under the age of five months with nasal mucus obtained from children well into the prodome of measles, 24 hours before the appearance of the rash. We are not told whether or not all the donors ultimately developed measles. But if they did, then theoretically their nasal mucus was infective. Whether the virus particles remained viable under the vaguely described experimental techniques is another matter.

Interestingly, 15 (37.5%) of the children showed a slight rise in temperature eight to 14 days after the inoculation. In a few, a small number of spots were noted on the face and body. Four of the 40 children subsequently had intimate contact with active measles cases and did not contract the disease. But we are not told if this contact took place during the communicable prodrome and early days of the rash or during the noncommunicable later period of the rash. Two children were challenged with reinoculation more than a year later and did not come down with the disease.

By today's standards there were many serious flaws in Dr. Herrman's research. Poor study design, the absence of controls, inadequate longitudinal follow-up, and overall small numbers make it difficult to draw any definitive conclusions. And human experimentation of this kind obviously would not be approved in the USA today.

Yet, it would be a serious error to dismiss his efforts and observations out of hand and relegate them to a shelf of historical curiosities. Dr. Herrman was clearly on to something, namely, that maternal antibodies protect against natural measles and that as they wane natural infections can occur, resulting in modified disease.

Another 48 years were to elapse after Dr. Herrman's experiments before measles vaccines became widely available. Efforts such as his represent the early building blocks upon which subsequent research was constructed. Those efforts have now brought us to the threshold of measles eradication in the United States. And they have also led to the development of better heat-stable vaccines for use in tropical areas of the world where the disease is similar epidemiologically and clinically to what Dr. Herrman saw in New York in the early part of this century.

But most importantly, in relation to Dr. Herrman's work, Albert B. Sabin, MD and his colleagues demonstrated in 1983 the successful immunization of children with and without maternal antibody by aerosolized measles vaccine. Ninety-six children, four to six months old, inhaled an aerosolized human diploid cell measles vaccine which proved immunogenic in all of them (*JAMA* 1983; 249:19). This showed that the presence of placentally transmitted antibodies does not prevent an immune response after inhalation of aerosolized vaccine as is the case with subcutaneous vaccine. The similarities between this recent research and Dr. Herrman's are striking. PASCAL JAMES IMPERATO, MD, Consulting Editor number of persons affected; 95 per cent of the entire population are infected at some time during their life. . . .

2. Infants under five months are relatively immune to measles. This immunity is striking, because practically all other children who come in intimate contact with a case contract the disease. In the rare instances in which they *are* infected, the disease appears in a mild atypical form. . . . All observers agree that under two months infants are absolutely immune. It is interesting to note that in countries in which the disease is not endemic, in which the mothers have not had the disease or have it during pregnancy, the infants are not immune during the first five months. There is apparently no great difference in the degree of immunity between breast fed and artificially fed infants.

When infants of six or seven months contract the disease it usually appears in a mild form, indicating that the immunity becomes less marked toward the end of the first year, for during the second year it is entirely absent and it is at this age that the disease causes the greatest number of deaths.

3. The immunity which the infant enjoys cannot be transferred by the method through the breast milk, for as the figures given in a previous paper (Arch. Pediat., Dec., 1914) show, artificially fed infants are also immune. It seems most probable that the immunity is conveyed through the placental circulation; however, it is not impossible that the infant elaborates its own antibodies. In this connection it may be worth noting that recent investigation (Groer) has shown that the characteristics of the antitoxin present in persons who have never had diphtheria (as found in the new-born) are identical with those due to immunization.

The experimental work of Hektoen, Anderson, Goldberger and others on human beings and monkeys has shown that the blood and the nasal and oral secretions of patients suffering from measles contain the infectious agent from 24 hours preceding to 24 hours following the appearance of the eruption. It is a filterable virus, but in Anderson's and Goldberger's experiments only a small percentage of the inoculated monkeys were infected by the filtrate. The infectious agent loses its virulence when kept more than 24 hours. . . .

Having convinced myself from a very large number of personal observations that infants under five months of age were relatively immune, I obtained the consent of a mother to inoculate her infant then four months old, explaining that the object was to render it immune against measles in the same way that vaccination protected against smallpox. It seemed fair to assume that as the infant at that age was not absolutely immune, direct inoculation would convert a temporary into a more or less permanent immunity. The child was carefully observed and at no time did it present any evidence of injury. I then proceeded cautiously to immunize others, and in no case was any unfavorable symptom noted. The material for inoculation was obtained from otherwise healthy children, taken 24 hours before the measles eruption appeared. For obvious reasons the mucous from the nose was taken. This was collected on swabs of cotton and kept in small glass vials. A moist chamber was improvised by placing a moistened piece of blotting paper at the bottom. Only perfectly healthy infants under five months were inoculated. The first were tested with the cutaneous tuberulin test, but when it was found that ten consecutive cases gave a negative reaction, the test was deemed unnecessary. The inoculations were made by applying the swab gently to the nasal mucous membrane. Up to the present time forty infants have been inoculated at the following ages: one at 2½ months, four at 3 months, three at 3½ months, six at 4 months, fifteen at 4½ months, and eleven at 5 months. The inoculations were made by preference between the fourth and fifth month because as the immunity was not absolute at that time, it seemed more likely that the organism would react with the formation of antibodies. The majority of the infants showed no distinct reaction; fifteen had a slight rise of temperature, from 100 to 101.5 degrees, varying in the time of its appearance from the eighth to the fourteenth day. Possibly a larger number of slight reactions would have been detected if the infants had been under constant observation. In a few instances a small number of spots were noted on the face or body, varying from the fourteenth to the eighteenth day, but these were so few and indistinct that they would ordinarily have escaped detection. No oral manifestations were present. Of the forty cases inoculated four have since come in intimate contact with cases of measles and have not contracted the disease. In addition, having satisfied myself that those who were inoculated were really immune, two of the cases were re-inoculated at the age of twenty-one and twenty-three months, respectively. In both cases the result was negative.

In view of the fact that the virus of measles has been shown to be filterable, it would seem preferable to use the filtrate. I therefore prepared a filtrate by thoroughly mixing the mucous with a normal saline solution and passing it through a Berkefeld candle. (For the privilege of utilizing the facilities of the laboratory I am indebted to Dr. Eugene P. Bernstein, pathologist to the hospital.) However, from some experimental work which I have done, I believe that the filtrate is usually non-virulent and could not be depended upon for the purposes of immunization. It will be noted that Anderson and Goldberger, using the filtrate from the blood, only succeeded in infecting monkeys in about twenty per cent of those inoculated. It would be desirable to devise some method by which the infectious material would retain its virulence for more than 24 hours.

I believe that the method which I have outlined presents a safe and simple means of immunizing against measles.

County of Suffolk
Department of Health Services
MAHFOUZ H. ZAKI, MD, DrPH, Editor
Director of Public Health

Measles Eradication

Can we succeed?

MAHFOUZ H. ZAKI, MD

The continuous decline in measles morbidity during the past decade and the progress achieved in the National Childhood Immunization Program prompted the federal government to embark on an ambitious program for measles eradication. On October 4, 1978, former Secretary of Health, Education, and Welfare, Joseph A. Califano, Jr., announced that the United States would seek to eliminate indigenous measles from the United States by October 1, 1982.

This brief presentation will review Suffolk County's attempt in this respect and will elaborate on the epidemiologic determinants involved in the eradication process and the problems that have to be solved to achieve this objective.

Suffolk County program

Prior to 1979, the Public Health Law of the State of New York, Section 2164, required that children entering school be immunized against measles, rubella, diphtheria, poliomyelitis, and mumps. The Departments of Health, Education, and Social Services of the State of New York have been conducting annual surveys to determine the extent of compliance of public and private schools, day care centers, and nursery schools with Section 2164 of the Public Health Law. These surveys have indicated that children entering public and private schools were more adequately immunized than those entering day care centers and nursery schools.

Despite the availability of free, effective vaccines and immunizing agents and the mandatory requirement of their administration, frequent outbreaks of measles and rubella do occur. During 1976, large outbreaks of measles occurred among high school students in a few areas in Suffolk County. To determine the immunization status of all students attending the schools where the outbreaks had occurred and not only of students entering school, the Suffolk County Department of Health Services conducted a survey of measles immunization, both quantitatively and qualitatively, in those schools. A student was considered inadequately immunized against measles if: (1) the student was immunized with dead vaccine; (2) the student was immunized before one year of age; (3) the student received both the vaccine and immune serum globulin; or (4) the student's record was unavailable or questionable, or a history of natural measles infection was not confirmed.

The survey indicated that among grades K to 4 the proportion of students inadequately immunized was 23.4%, in grades 5 to 9, 38.4%, and in grades 10 to 12, 43.8%. A similar survey conducted in Nassau County during the same period showed that among the 5 to 9-year age group, 22% of students were not adequately protected against measles as compared with 26% among those 10 to 14 years, and 42% among those 15 to 19 years of age. The findings of the two surveys indicated that a high proportion of the students attending high schools were not adequately immunized against measles, which could explain the reason for the high attack rate among older children in the measles outbreaks.

Day care centers and nursery schools are, generally speaking, less vigorous in the enforcement of the immunization laws. This has been witnessed both in the State surveys and in a Suffolk County study undertaken in 1974.

The deficiencies uncovered in the immunization surveys prompted Suffolk County to undertake an aggressive immunization campaign in 1976, prior to the enactment of the 1979 Immunization Law, which required local health agencies to take an active role in the child immunization programs. The Suffolk program was initiated for two reasons: (1) to prevent recurrence of the measles outbreaks, such as the ones of 1976 among junior high school students in the North Fork of Long Island; and (2) to ensure that all children, not only those entering school, be protected against childhood diseases.

Considering that there are about 340,000 school children in Suffolk County, the operation of a county program of this magnitude would have required the allocation of tremendous funds and additional staff. In these years of fiscal austerity the only way this program could have operated was to do the following:

Address reprint requests to Suffolk County Department of Health Services, 225 Rabro Drive East, Hauppauge, New York 11787 (Dr. Zaki).

Suffolk County Mass Immunization Campaign 1976–1981

	Immunizing Agent							
Year	Measles	Mumps	Rubella	Polio	Diphtheria & Tetanus	Pertussis	No. of Children Immunized	No. of Doses Administered
1976–1977	24,065	2,769	12,725	1,845	3,356	417	27,000	45,177
1978–1979	40,916	7,908	2,692	5,560	12,800	1,161	50,997	71,037
1980–1981	15,316	27,497	9,771	25,154	36,388	921	58,288	115,047
TOTALS	80,297	38,174	25,188	32,559	52,544	2,499	136,285	231,261

1. To request assistance and cooperation of the school districts in providing physicians, nurses, school health teachers, and auxiliary personnel for the program
2. To utilize the physicians and nurses employed by the Division of Public Health and assigned to programs such as the Physically Handicapped Children's Program, the Bureau of Chest Diseases, and the Bureau of Public Health Nursing to assist the Bureau of Epidemiology and Disease Control in operating the mass immunization campaign
3. To invite volunteers from community groups, civic associations, and religious organizations to participate in the operation of the program

The success of the program in its initial stages prompted most of the school districts and volunteer groups to give their full support and cooperation. The table shows the achievements of the program in terms of the number of children immunized and the doses administered. It is interesting to note that since its inception the program administered over 230,000 immunizing doses to over 136,000 children. During the period 1980 to 1981, more than 115,000 doses were administered to some 58,000 students. In addition to those immunized through the mass campaign, several thousand children received their immunizations in the regularly scheduled child health clinics in our eight health centers. This swift, massive assault resulted in the most drastic reduction in the incidence of measles and rubella. The 1981 rates for measles and rubella in Suffolk County were 0.6 per 100,000 for both (Figs 1, 2). This rate was further reduced to 0.3 per 100,000 in 1982.

In 1979, Public Health Law 2164 was amended to include all children, not only those entering school, to be adequately immunized against the five childhood diseases previously mentioned. Although the responsibility for having the children immunized rested with the parents or guardians, school administrators also were required not to allow nonimmunized or inadequately immunized children to be admitted to schools.

There is no doubt that the new immunization law has eliminated some of the deficiencies of the former law and prompted many health agencies to assume a more aggressive role in childhood immunization programs. The law, however, was remiss in its rules and regulations, which did not differentiate clearly between those children who "were in compliance with the law" and those who have "immunization requirements complete." In addition, the law exempted female students who have passed their 11th birthday from the rubella protection requirements because of the remote possibility of inflicting harm on the fetus of a pregnant student. Although this is theoretically possible, studies by the Centers for Disease Control in Atlanta, Georgia, of all known cases of such inadvertent administration of rubella vaccine have not shown any fetal damage attributable to the vaccine in any infant brought to term.*

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* Rubella vaccination during pregnancy—United States, 1971–1981. MMWR 1982; 31:477–481.

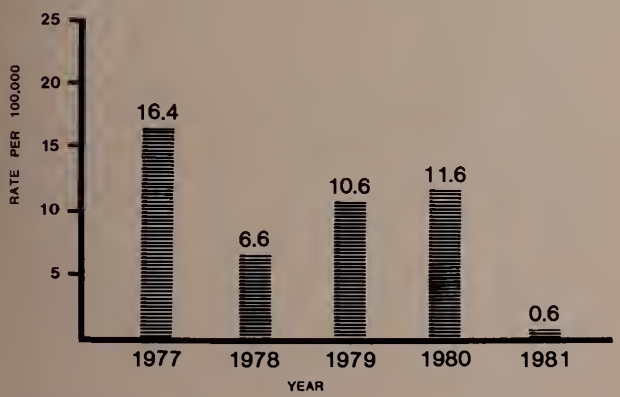

FIGURE 1. Incidence of measles per 100,000 population, Suffolk County, N.Y.

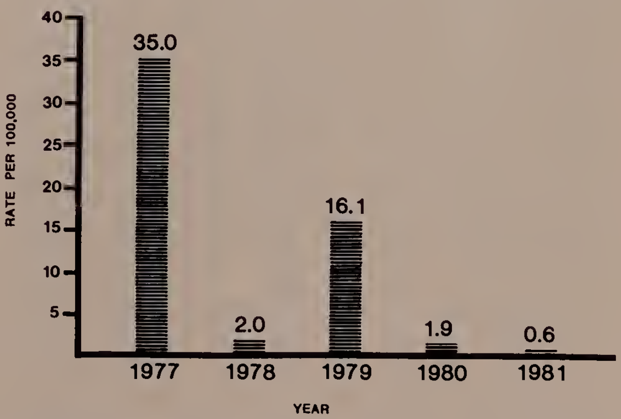

FIGURE 2. Incidence of rubella per 100,000 population, Suffolk County, N.Y.

Prospects for measles eradication

Eradication of an infection means, literally, the wiping out of the infection and the extinction of the responsible pathogen. As the name implies, eradication is an absolute process, and not a relative goal. In other words, it follows an "all or none" phenomenon. Mathematically, an infection will reach the baseline if the regression slope of the trend remains negative on successive years. The rapidity with which the infection will be eradicated depends on the magnitude of the regression slope.

Experience gleaned from many infectious diseases, however, has shown that once the morbidity of a disease reaches a very low level, a residual infection often persists in the population and a state of equilibrium becomes established between the agent, host, and environmental components of the disease process. This is very well demonstrated by the malaria eradication programs that have been carried out for more than four decades in many areas of the world. Despite the tremendous decline in malaria morbidity and mortality, cases are still being reported from the so called "eradicated areas." Some of these are indigenous while others are imported.

The United States and the Scandinavian countries conducted extensive eradication programs for bovine tuberculosis in the late 1930s and early 1940s. Slaughtering of infected cattle was an essential feature of the program; in spite of this measure, bacteriologic eradication was never achieved in these countries. The disease reached a very low level, which has been static for several years and may remain so for decades to come.

Several determinants play a role in the eradication process, and a few criteria have to be met before a disease can be eliminated from a population. These include:

1. That the disease should have no carrier state whether in a dormant or infectious form
2. That the disease should have no animal hosts or reservoirs
3. That an effective vaccine is available and is easily administered to the population at large without producing serious side reactions
4. That the number of new susceptibles introduced per generation is reduced to a minimum
5. That the fraction of susceptibles infected by each existing infectious case is reduced to a minimum

Now, a question is frequently asked: Have we really achieved radical eradication of any disease? Assuming that current incidence reports are reliable and that no hidden or unrecognized cases do occur, the answer is yes and the disease is smallpox.

Can this success story be repeated in the case of measles? With diligent aggressive efforts on the part of the health agencies and the medical profession at large, an all-out assault on the measles problem can result in the ultimate elimination of the disease. Although Califano's projection of a 1982 victory has not been achieved, the disease can probably be conquered before the end of the current decade.

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Measles Prevention

These revised ACIP Measles Prevention recommendations represent an update of the previous recommendations (*MMWR* 1978; 27:427–30, 435–7) to include current information about vaccine effectiveness and measles elimination efforts. There are no basic changes in approach. Further discussion is included of atypical measles syndrome and of revaccination of prior recipients of killed measles virus vaccine. Recommendations for vaccination of persons with allergies are revised. As the incidence rate of measles declines, serologic confirmation becomes more important. New recommendations for international travel are included.

NORMAN B. SCHELL, MD

Introduction

Measles (rubeola) is often a severe disease, frequently complicated by middle ear infection or bronchopneumonia. Encephalitis occurs in approximately one of every 2,000 reported cases; survivors often have permanent brain damage and mental retardation. Death, predominantly from respiratory and neurologic causes, occurs in one of every 3,000 reported measles cases. The risk of death is known to be greater for infants and adults than for children and adolescents.

Measles illness during pregnancy increases fetal risk. Most commonly, this involves premature labor and moderately increased rates of spontaneous abortion and of low birth-weight infants. Results of one retrospective study in an isolated population suggest that measles infection in the first trimester of pregnancy was associated with an increased rate of congenital malformation.

Before measles vaccine was available, more than 400,000 measles cases were reported each year in the United States. Since the licensure of vaccine in 1963, the collaborative efforts of professional and voluntary medical and public health organizations in vaccination programs have resulted in a 99% reduction in the reported incidence of measles. In 1981, a provisional total of 3,032 cases were reported. In the prevaccine era, most measles cases affected preschool

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Excerpted from Morbidity and Mortality Weekly Report 1982; 31: 218–231.

and young school-age children. In 1980, more than 60% of cases in which the age was known occurred among persons 10 years or older. More than 25% of the cases were reported among the 10- to 14-year-old age group, and more than 20% were reported among the 15- to 19-year-old age group.

With the highly effective, safe measles vaccine now available, the degree of measles control that has been achieved in the United States has depended largely on the effectiveness of the continuing efforts to vaccinate all susceptible persons who can safely be vaccinated. An initiative to eliminate indigenous measles from the United States by fall of 1982 is proceeding satisfactorily.

Measles virus vaccine

Live measles virus vaccine available in the United States is prepared in chick embryo cell culture. The vaccine virus strain has been attenuated beyond the level of the original Edmonston B strain and is therefore known as a further-attenuated strain. Vaccine prepared with the further-attenuated measles virus causes fewer reactions than its predecessor, Edmonston B vaccine, which is no longer distributed in the United States. Measles vaccine is available in monovalent (measles only) form and in combinations: measles-rubella (MR) and measles-mumps-rubella (MMR) vaccines.

Measles vaccine produces a mild or inapparent noncommunicable infection. Measles antibodies develop in at least 95% of susceptible children vaccinated at about 15 months of age or older with the current further-attenuated vaccine.

The most commonly employed test for measurement of immunity to measles is the hemagglutination-inhibition (HI) test. Most, but not all, immune individuals will have measles HI antibody levels of 4 or greater. More sensitive methods to determine measles immunity are not widely available at present. Routine serologic screening to determine measles immunity is not recommended.

Vaccine shipment and storage. Failure of protection against measles may result from the administration of improperly stored vaccine. Since 1979 a new stabilizer has been added to the vaccine that makes it more resistant to inactivation by heat. However, during storage before reconstitution, measles vaccine must be kept at 2° to 8°C (35.6° to 46.4°F) or colder. It must also be protected from light, which may inactivate the virus. Vaccine must be shipped at 10°C (50°F) or colder and may be shipped on dry ice.

Vaccine usage

General recommendations. Persons can be considered immune to measles only if they have documentation of: (1) physician-diagnosed measles, (2) laboratory evidence of measles immunity, or (3) adequate immunization with live measles vaccine on or after the first birthday.

Most persons born before 1957 are likely to have been infected naturally and generally need not be considered susceptible. All other children, adolescents, and adults are considered susceptible and should be vaccinated, if there are no contraindications. This includes persons who may be immune to measles but who lack adequate documentation of immunity.

Dosage. At least 95% of vaccine recipients develop measles antibody following a single dose of live vaccine administered around 15 months of age. Since evidence now extending through 16 years indicates that the protection conferred is durable, there is no need for a "booster" dose of vaccine.

There is no evidence that measles transmission can be sustained among the small percentage of persons who remain susceptible after receiving one dose of vaccine.

After weighing the evidence, the Committee continues to recommend only a single dose of measles vaccine around 15 months of age.

Age at vaccination. Measles vaccine is indicated for persons susceptible to measles, regardless of age, unless otherwise contraindicated (as follows). Current evidence indicates that for a maximum rate of seroconversion, measles vaccine should preferably be given when children are about 15 months of age.

Complete measles control will require protection of all susceptibles; therefore, increased emphasis must be placed on vaccinating susceptible adolescents and young adults. Susceptible persons include those who received inactivated vaccine or who were given live measles virus vaccine before their first birthdays, as well as those who were never vaccinated or never had measles.

Revaccination

Previous vaccination with live vaccine. Persons vaccinated with live measles vaccine before their first birthday should be identified and revaccinated.

There has been some confusion concerning the immunity of children vaccinated against measles at 12 months of age. Some recent data have indicated a slightly lower rate of seroconversion among children vaccinated at 12 months of age than among those vaccinated at 13 months or later. This difference is not sufficient to warrant routinely revaccinating persons who were vaccinated at 12 months of age since the vast majority are fully protected. If, however, the parents of a child vaccinated when 12 to 14 months old request revaccination for the child, there is no immunologic or safety reason to deny the request.

Previous vaccination with killed vaccine or vaccine of unknown type. In the past, the Committee has recommended revaccination with live measles vaccine for persons vaccinated at any age with inactivated vaccine (available in the United States from 1963 to 1967) and for persons vaccinated with inactivated vaccine followed by live vaccine within three months. This recommendation was based on the knowledge that some persons who had received inactivated vaccine were at risk of developing severe atypical measles syndrome when exposed to the natural virus. Persons who developed atypical measles occasionally developed serious complications requiring hospitalization. The recommendation was also based on the belief that revaccination with live measles vaccine would usually protect such persons against atypical measles. Limited data suggest that a substantial percentage of persons revaccinated with live measles vaccine will be protected, although the duration of immunity and degree of protection are not known precisely.

A wide percentage range (4% to 55%) of prior recipients of killed measles vaccine (licensed 1963–1969) who were revaccinated with live measles vaccine have been reported to have had reactions to the live vaccine. Most of these reactions are mild and consist of local swelling and erythema with or without low-grade fever lasting one to two days. Rarely, more severe reactions, including prolonged high fevers and extensive local reactions, have been reported that have required hospitalization. Prior recipients of killed measles vaccine are more likely to have serious illness when exposed to natural measles than when given live measles virus vaccine.

Individuals exposed to disease

Use of vaccine. Exposure to measles is not a contraindication to vaccination. Available data suggest that live measles vaccine, if given within 72 hours of measles exposure, may provide protection.

Use of IG (immune globulin). IG can be given to prevent or modify measles in a susceptible person within six days of exposure. The recommended dose of IG is 0.25 mL/kg (0.11 mL/lb) of body weight (maximum dose, 15 mL). IG may be especially indicated for susceptible household contacts of measles patients, particularly contacts under one year of age, for whom the risk of complications is highest. Live measles vaccine should be given about three months later when the passive measles antibodies should have disappeared, if the child is then at least 15 months old. IG should not be used in an attempt to control measles outbreaks.

Side effects and adverse reactions

About 5% to 15% of vaccinees may develop a temperature of 103°F (39.4°C) beginning about the sixth day after vaccination and lasting up to five days. Reports generally indicate that most persons with fever are otherwise asymptomatic. Transient rashes have been reported in approximately 5% of vaccinees. Central nervous system conditions including encephalitis and encephalopathy have been reported once for approximately every million doses administered.

Subacute sclerosing panencephalitis (SSPE) is a "slow virus" infection of the central nervous system associated with measles virus. Results from studies indicate that measles vaccine, by protecting against measles, significantly reduces the chance of developing SSPE. The recent decline in numbers of SSPE cases in the presence of careful surveillance is additional strong presumptive evidence of a protective effect of measles vaccination. However, there have been some reports of SSPE in children who did not have a history of natural measles but who did receive measles vaccine. Some of these cases may have resulted from unrecognized measles illness in the first year of life or possibly from the measles vaccine.

Revaccination risks. There is no evidence of enhanced risk from receiving live measles vaccine in persons who have previously received live measles vaccine or had measles. Specifically, there does not appear to be any enhanced risk of SSPE.

On exposure to natural measles, some children who had been given inactivated measles virus vaccine previously have developed atypical measles, sometimes with severe symptoms. Reactions, such as local edema and induration, lymphadenopathy, and fever have at times been observed when live measles virus vaccine was administered to recipients of inactivated vaccine. However, despite the risk of local reaction, persons born since 1956 who previously have been given inactivated vaccine (whether administered alone or followed by a dose of live vaccine within three months) should be revaccinated with live vaccine to avoid the severe atypical form of natural measles and to provide full and lasting protection.

Precautions and contraindications

Pregnancy. Live measles vaccine should not be given to women known to be pregnant. This precaution is based on the theoretical risk of fetal infection, which applies to the administration of any live virus vaccine to women who might be pregnant or who might become pregnant shortly after vaccination. No evidence exists to substantiate this theoretical risk from measles vaccine. Considering the importance of protecting adolescents and young adults against measles with its known serious risks, asking women if they are pregnant, excluding those who are, and explaining the theoretical risks to the others are the recommended precautions in a measles immunization program.

Febrile illness. Vaccination of persons with febrile illness should be postponed until recovery. However, susceptible children with minor illnesses such as upper respiratory infections should be vaccinated. Considering the importance of protecting against measles, medical personnel should use every opportunity to vaccinate susceptible children.

Allergies. Live measles vaccine is produced in chick embryo cell culture. Hypersensitivity reactions very rarely follow the administration of live measles vaccine. Most of these reactions are considered minor and consist of wheal and flare or urticaria at the injection site. However, with over 131 million doses of measles vaccine distributed in the United States, there have been three reported cases of immediate allergic reactions in children who had histories of anaphylactoid reactions to egg ingestion. These reactions to vaccine potentially could have been life threatening. Two children experienced difficulty breathing; one of these had hypotension. Persons with a history of anaphylactoid reactions (hives, swelling of the mouth and throat, difficulty breathing, hypotension and shock) after egg ingestion should be vaccinated only with extreme caution. Evidence indicates that persons are not at increased risk if they have egg allergies that are not anaphylactoid in nature. Such persons should be vaccinated in the usual manner. There is no evidence to indicate that persons with allergies to chickens or feathers are at increased risk of reaction to the vaccine.

Since measles vaccine contains trace amounts of neomycin (25 μg), persons who have experienced anaphylactoid reactions to topically or systematically administered neomycin should not receive measles vaccine. A history of contact dermatitis to neomycin is not a contraindication to receiving measles vaccine. Live measles virus vaccine does not contain penicillin.

Tuberculosis. Tuberculosis may be exacerbated by natural measles infection. There is no evidence, however, that the live measles virus vaccine has such an effect. Therefore, tuberculin skin testing is not a prerequisite for measles vaccination. If there is a need for tuberculin skin testing, it can be done on the day of vaccination and read 48 to 72 hours later. It is prudent to wait four to six weeks after measles immunization before administering a tuberculin skin test since measles vaccination may temporarily suppress tuberculin reactivity.

Simultaneous administration of vaccines

The simultaneous administration of MMR (measles-mumps-rubella) and OPV (oral poliomyelitis vaccine) has resulted in seroconversion rates and rates of side effects that are similar to those observed when the vaccines are administered separately. Field experience and antibody data regarding simultaneous administration of DTP (diphtheria-tetanus-pertussis) and measles vaccine indicate that the protective response is satisfactory and the incidence of side effects is not increased. Because of the limited accessibility of some population subgroups, the

Committee recommends taking maximal advantage of each clinic visit to promptly vaccinate susceptible persons 15 months of age or older, including, if necessary, administering MMR, OPV, and DTP simultaneously.

Outbreak control

All reports of suspected measles cases should be investigated rapidly. A measles outbreak exists in a community whenever a single case is confirmed as measles. Once an outbreak occurs, preventing dissemination of measles depends on promptly vaccinating susceptible persons. Ideally, they will have been identified before the outbreak (by school record reviews, for example); if not, they must be quickly identified.

An effective means of terminating school outbreaks and increasing rates of immunization quickly is to exclude all children or adolescents who cannot present valid evidence of immunity through vaccination or prior disease. Experience with outbreak control indicates that almost all students who are excluded from school because they lack evidence of immunity to measles quickly comply with requirements and are promptly readmitted to school. Pupils who have been exempted from measles vaccination because of medical, religious, or other reasons should also be excluded from school. Exclusion should continue until at least two weeks after the onset of rash of the last case of measles in the community. Less rigorous approaches such as voluntary appeals for vaccination have not been effective in terminating outbreaks.

Recent studies have indicated that some persons vaccinated before 11 months of age may have a less predictable immune response to measles vaccine when revaccinated on or after the first birthday. Approximately 50% of infants who failed to seroconvert initially will, after revaccination, develop HI antibody that is persistent; the remaining 50% will not develop sustained levels of HI antibody. Evaluations in one study showed that all these children, whether HI antibody-negative or -positive, had antibody detectable by a sensitive neutralization test. There is no evidence to indicate that these children are susceptible to measles.

The risk of measles complications from measles is high among infants less than one year of age. Therefore, considering the benefits and risks, the Committee recommends that infants as young as six months of age may be vaccinated as preexposure prophylaxis when exposure to natural measles is considered likely. Because infants vaccinated before the first birthday have a significantly lower rate of seroconversion, they should be revaccinated when they are about 15 months old to ensure protection.

Surveillance

As the incidence rate of measles declines in the United States, aggressive surveillance becomes increasingly important. Known or suspected measles cases should be reported immediately to local health departments. Serologic confirmation should be attempted for every suspected case of measles that cannot be linked to a confirmed case. Measles infection can be serologically confirmed by a four-fold rise in CF or HI antibody titer. The acute-phase serum specimen should be drawn as soon after rash onset as possible, preferably within the first seven days after rash onset. The convalescent-phase serum specimen should be drawn ten or more days after the acute-phase serum specimen. If the acute-phase specimen is drawn more than seven days after rash onset, a four-fold rise in antibody titer may not be apparent. Occasionally four-fold rises may not be detected even if the first specimen is drawn within the first seven days after rash onset. Measles infection may also be serologically confirmed by demonstrating measles-specific IgM antibody. A single serum specimen should be drawn between one and two weeks after rash onset. Although measles-specific IgM antibody may be detected shortly after rash onset, false-negative results may occur if the specimen is drawn earlier than one week or later than two weeks following rash onset. Reporting of suspect cases and implementation of outbreak-control activities should not be delayed while awaiting laboratory results.

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The State of Health in the State of New York — Who Pays?

This seminar was conceived as part of the medical school curriculum for second year students, with the intent of introducing concepts of cost and cost containment in the delivery of medical services by different parts of this institution. These subjects are sometimes omitted in the course of medical education, and physicians are often criticized for that presumed ignorance of the economic impact of their activities.

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Public-Sector Support of Medical Care

Past, Present, and Future

SENATOR TARKY LOMBARDI, Jr.

My first full year in the New York State Senate, 1966, saw the advent of the public health programs to provide health care to the elderly and indigent that are known as Medicare and Medicaid. As one of the legislators who voted for the Medicaid program, I found myself in the middle of a hornet's nest when the reaction to Medicaid set in. Those events, the passage and then the reaction to Medicaid, launched my career in health care financing, which has consumed much of my time and attention in the Legislature.

To talk about the containment of health care costs, we have to review some history. Years ago, when hospitals were evolving from the old alms houses to the proprietary and voluntary nonprofit hospital system that we know today, health care services in this nation were delivered according to a person's ability to pay. When the insurance industry became interested in health care, a new group of "third-party payors" was created. Government involvement through much of this period was limited. This all changed with the federal legislation which created Medicare and Medicaid. Title XVIII, the Medicare program, was intended for the elderly, and I do not think Congress itself realized the significance of the rider in that legislation which created Title XIX, a program to provide medical services to the indigent. The word "Medicaid" was not used in any federal legislation. To my knowledge, the word was coined by a Syracuse reporter, Gus Bliven; the term was picked up by others and is now used nationwide to describe Title XIX.

When the Medicaid program was adopted in New York there was a federal clause that the state had to maintain the same level of effort in health care that had existed before the adoption of Medicaid. New York historically has been a generous state, with many programs to provide health care to the indigent. When we passed the Medicaid program in 1966, we incorporated into it all of these existing programs, and we also established a new eligibility level. In taking these steps, we set the pattern for what has become one of the largest public health programs since New York has one of the highest indigent populations in the country. In the City of New York, one out of six people is now on public assistance or on the Medicaid program.

The attitude of Americans toward Medicaid has changed. Before 1966, people received health services if they could afford to pay for them, or if they had insurance that would cover the costs of care. Hospitals did not have to accept every patient. But today, because of changes in federal and state laws, hospitals cannot deny access to people who come to them for care, regardless of their ability to pay. In essence, health care services have become a right. There is nothing wrong with this attitude, but we have to be aware of it when we try to determine what to do about containing health care costs.

There are other influences on cost containment including the size of the health care industry and the level of government involvement in it. Health care costs today exceed 9% of the gross national product and the health care industry is the largest in the nation, employing more people than the automobile or steel industries. Through Medicaid and Medicare, government is now paying more than one third of all health care costs, and with that level of involvement, taxpayers demand that government not only pay but also control costs.

Until recently, Medicaid and Medicare were basically open-ended programs, with no ceilings on expenditures. In New York State, we have found

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Senator Lombardi is Chairman, New York State Senate Health Committee; and Chairman, New York State Council on Health Care Financing.

three ways to contain costs in the delivery of health services: through control of eligibility levels, through control of benefit levels, and through control of what is paid to the people who provide the services. In New York, we have done all these things. Although eligibility levels increased for a time, they have now begun to stabilize. We also tried to decrease the benefits available. At one time, Governor Carey tried eliminating certain programs, but since it is difficult to take away existing benefits, these have now been restored. The State has also tried to squeeze down the costs of the provider. At this point, I think there is little else we can do to limit costs.

In looking at the costs of providing health care services, the areas to examine are inpatient hospital costs, long-term care costs (the most expensive area), and costs of delivering outpatient services. It is the future physicians who will face these questions. They may be in a multimillion dollar facility with the best technology available, but the decisions they make will determine the cost levels. We are in a new environment, with state and federal limitations, where Medicare and Medicaid are being cut back. In the future, there will be a tremendous restraint on our ability to deliver and pay for services.

New York State's system of dealing with hospital inpatient costs has been counterproductive. Hospitals are reimbursed on a per diem basis: If you enter a hospital for a cut finger or for a heart transplant, the cost per patient per day is the same. The State has averaged costs in trying to develop a functional reimbursement system. The rate is established through a formula, with the cost of the Medicaid money paid to hospitals shared. Fifty percent is paid by the federal government, 25% by the state, and 25% by the county. This system has caused problems at all levels of government. County government, for example, has complained that it cannot afford the growth that has occurred in Medicaid. In 1966 county governments were not responsible for health care costs, and today a major portion of county budgets is consumed by medical assistance.

Because of the costs of the programs, the public is concerned about how much we are paying the hospitals and whether or not they are operating efficiently. Hospitals, in turn, are forced to operate like hotels. If a hospital has an empty room, that room is not generating revenue. Yet, the hospital still has to meet its overhead. This is not an efficient system. You cannot operate a facility on the idea that the more you spend, the more you earn. If you spend money now, then next year when the state computes your reimbursement rate the rate will be higher, based on the cost of services plus an inflation factor. It is called the "cost-plus" system. However, if the hospital becomes more efficient and lowers its cost, then next year the reimbursement rate will be lower. The hospital is penalized for efficiency. Recently the State has put into effect a number of complicated penalty measures, to try to change the reward-for-inefficiency basis of the system, but this penalty system has not yet worked well.

However, the State has made some progress on inpatient costs. In 1978, the Legislature formed a Health Care Financing Council, which has come up with a revised formula to develop incentives for the productive and prudent operation of hospitals. One of the ideas of this system is that any money a hospital can save in its operating costs should accrue to the hospital as well as to the taxpayers. This new system is being negotiated now (*see accompanying update*).

The area where we are perhaps spending the most public money is long-term care. Here the physicians have a great impact on costs because they decide whether or not a patient should be admitted to an institution. When a person is placed in a nursing home, is it for the patient's benefit, for the convenience of the physician, or for the convenience of the family? What is the cost impact? Long-term care now takes about 40% of the Medicaid dollar, and that percentage is growing because the aging population is growing. The ratio of young people to older people in this country is changing so fast that we now seriously have to consider how we are to pay for services to our ever-growing older population.

In New York, I developed and the State Legislature enacted the Nursing Home Without Walls Program, to put long-term care services into the home. The program allows a patient to live a more normal life, still as part of the community. The State does not have to pay the costs of room and board, but only for the health care services actually delivered to the patient.

The third area in cost containment is primary care, and here again the payment mechanism drives the system. Health insurance will pay a person to go to the emergency room or outpatient clinic, costing between $60 and $120, but it usually will not pay $15 for care in a physician's office. But if you allow reimbursement for primary care, there may be many more encounters of service, in which case the volume alone would exceed any savings in cost per visit. The problem is, when you give people carte blanche services under a public health program, they no longer act as prudent buyers and do not care whether they go to an emergency room for $120 or to a physician's office for $15.

To encourage families to become prudent buyers and to assist those families with extraordinary medical expenses, we developed New York's Catastrophic Health Care Expense Program.

The law is on the books but has not yet been activated because it is tied to the Medicaid program. The federal government is not willing at this time to waive the needs test for those who would be eligible for this program. Under this program, a family would not have to impoverish itself in order to obtain assistance in meeting catastrophic medical expenses beyond its means to pay. It is a cost-sharing program which incorporates private insurance and a family's financial resources with medical assistance. The New York State law required federal participation but thus far, this has not been forthcoming. We are now attempting to develop demonstration programs with State participation only.

All these subjects should be explored in detail. One other area to mention is the physician's position in this complex system. One question future physicians will be dealing with is whether or not to practice defensive medicine because of the malpractice risk. Think what that does to driving up the costs of the health care system.

There is a story of a congressman who walked into a Medicaid clinic complaining of chest pain. Actually, there was nothing wrong with him; he feigned the chest pain. But the physician did an EKG, blood tests, x-rays, and the whole procedure. And at the end, the congressman walked out and said, "See, there's fraud in Medicaid." He knew there was nothing wrong with him and he contended that if the doctor had just examined him the doctor would have known that also, but instead he had ordered $200 worth of tests. But let me ask you: If a 55-year-old man walked into your office complaining of chest pains, could you afford to take the risk of just giving him a cursory examination and say there is nothing wrong, go home, take an antacid? If he died of a heart attack or if something else happened, it would have been a medical malpractice problem, which is another element of cost containment.

A reminder, then, to today's medical student: It is you who will make the important decisions on cost containment. You will see the patient, you will order the services, you will determine the level of care the patient needs. It is all going to be your decision.

Update on new reimbursement system

The new hospital inpatient reimbursement system was passed by the Legislature and enacted into law in July 1982 as Chapter *536*, Laws of 1982 and became effective January 1, 1983.

This new reimbursement method which was developed by the Council on Health Care Financing, of which I am Chairman, was based on the following principles:

- Hospitals should be advised prior to the beginning of a fiscal year of the reimbursement it could anticipate during that year (a prospective system).
- Rates of reimbursement for inpatient services should be based on costs determined to be necessary in providing these services.
- Hospitals' financial needs must be considered in determining reimbursement rates.
- Hospitals must have the opportunity of increasing prospectively set rates by justifying costs eliminated from the reimbursement computation as unnecessary or by justifying additional costs related to service expansion, changes in patient needs, changes in state or federal requirements, etc.
- Rates of reimbursement must be fair and equitable to both hospital and payor.

The system works on a three-year cycle. Reimbursement rates for 1983 are based on 1981 costs determined necessary in providing inpatient services and increased to reflect anticipated expenditure levels in 1983. For 1984, rates will be established based on the 1983 authorized revenues with upward adjustment for anticipated inflation and additional considerations of financial needs. The 1985 reimbursement rates will be based on the 1984 authorized revenues, using the same process. This means that a hospital, barring significant changes in volume or patient need, that can keep its costs below the authorized revenues, keeps the difference. A hospital that incurs costs in excess of authorized revenues will not be reimbursed for excess costs unless it can justify the expenditures.

A major component of the system is the cost analysis process under which hospital costs are determined necessary or unnecessary. This is basically a "peer grouping process" under which the costs of comparable hospitals are compared and costs in hospital exceeding a cost standard are not considered for reimbursement. It is a complex process that attempts to compare hospitals with other hospitals having the same cost influencing characteristics, such as type of hospital, geographic area, size, etc. The system also adjusts for differences in wage levels and patient diagnosis for comparison purposes.

It has long been recognized that hospitals provide charity care and that they have uncollectible accounts. Before January 1, 1983, there was no equitable system for assisting hospitals to meet the costs of uncompensated care. It has also been recognized that hospitals need an amount in addition to actual historical costs inflated to anticipate expenditure levels to maintain stability. The legislation addressed these concerns as follows:

- The establishment of regional pools to assist hospitals to meet the costs of uncompensated care. These pools are created by including in all reimbursement rates specific amounts to be distributed within the region on the basis of need. Public, voluntary, and proprietary hospitals are eligible to participate in this pool.
- Additional regional pools are created to assist those financially distressed voluntary and proprietary hospitals whose resources are insufficient to meet those costs of bad debts and charity care not met by the distribution of the first pool.
- A discretionary fund is established whereby each hospital will receive an additional 1% of its reimbursable costs to do with as it wishes. In 1984, this can be increased up to 2% with eligibility for the additional percent dependent on meeting specific criteria.

Since all payors will participate in the financing of these funds, this is a major step in promoting hospital financial stability.

Actually, our new system can be conceptually described in a few short sentences. Hospitals file certified financial reports indicating revenues and costs. The reported costs are analyzed through a peer grouping process. If, as a result of this process, certain hospital costs are disallowed for reimbursement purposes, the hospital has an opportunity, as well as a responsibility, to justify these costs. The costs that are determined to be reimbursable are then inflated to anticipated expenditure levels by a percentage factor developed by an independent panel of economists that considers inflation in the type of expenditures incurred by hospitals. To the resulting rate are added the allowances that create the funds to be distributed on the basis of hospital need.

Until this year, Medicare reimbursement has been retrospective, based on actual costs incurred in providing the specific services utilized by Medicare beneficiaries. In order to implement this system it was necessary that the federal government approve a waiver which would bring Medicare into the New York State Hospital Inpatient Reimbursement Methodology. The Secretary of Health and Human Services approved this waiver in September 1982. On January 1, 1983 all payors were included for the first time in a prospective inpatient reimbursement system.

In order to reap benefits from this new system, hospitals will have to become more prudent and keep their increased costs at a percentage below the inflation factor developed by the panel of economists.

Our system is new and complex. As with anything different, it will take getting used to—but it will, in the long run, be beneficial to our hospitals, the patients, the taxpayers, and the insurers. We expect that our new system will help stabilize our hospital industry by giving hospitals a predictable system that will enhance savings and encourage the provision of quality services in the most efficient and cost-effective manner. It will at a conservative estimate provide some $430 million more to our hospitals than otherwise would have been available under the former fragment in New York State and it insulates our hospitals from current and future federal cuts.

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The Medical School: Who pays for teaching, research, and the burden of tertiary care?

RICHARD P. SCHMIDT, MD

In assigning the title of this article, Dr. Winkelman asks good questions. My question in response is: "Does anyone know the answers?" Whatever the answers may be, they will not be satisfactory to all, especially to those who control budgets for teaching, research, and patient care in institutions such as ours and who wish more precise categorization and justification than we are able to give. As an example, a few years ago a major national study[1] was commissioned by the Congress in an attempt to determine the costs of education in medical schools. This study was part of an effort to examine the federal share of such costs. Among the schools chosen, one distinguished New York State medical school appeared to have educational costs of about $28,000 a year per student, while those of another school upstate were reported at about $7,000. Note that these were educational costs and not the total budgets for operating an institution. Later, all of the health sciences centers in the State University of New York were subjected to a similar study.[2] In this study, our own College of Medicine was criticized because our costs appeared to be considerably above those of a sister institution. On close examination, however, our costs only appeared to be higher because of the method used. Total time spent in various categories was reported for one week by each member of the teaching faculty. Our faculty reported a greater proportion of effort in teaching than did our colleagues elsewhere. Hence, in allocating costs, the costs of educating a medical student at Upstate appeared higher than elsewhere. Our institutional costs were lower but we were adversely affected because our teachers did more teaching. I use this example to illustrate some of the problems encountered when we try to address Dr. Winkelman's original questions. The attempts to get answers may give rise to answers that are elaborate, numerical, statistically analyzed—and wrong.

In a recent issue of the *Journal of the American Medical Association*, Petersdorf and Wilson[3] review three major eras of government influence on medical education, hence, also on teaching hospitals. The first is the era of biomedical research beginning after World War II in recognition of rapid expansion in science and technology and the need for fundamental research biology and medicine to support more effective approaches to human disease. Billions of federal dollars became available for medical research and research training. This resulted in a scientific and technologic revolution in medicine and also led to the growth of that which we call tertiary care in our teaching hospitals. Major research centers were associated with our medical schools and teaching hospitals; technologic and scientific advances were first usually applied in teaching hospitals and made available by the presence of full-time teaching/re-

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search physicians. The health manpower era followed, extending from the 1960s into the middle and late 1970s, again with federal support for construction of new facilities and educational support in the form of grants. In less than 15 years, the number of medical students in the United States more than doubled from approximately 62,000 in 1965 to more than 130,000 in 1980–1981. We now appear to be in a public service era. Research funding is still large, but it is not growing with inflation. Health manpower grants have diminished, and capitation funds are no longer given to medical schools (Upstate lost almost a million dollars between 1972 and 1978). One result of the public service era may be increased education of physicians for primary care and outreach into the community.

I am supposed to be speaking about tertiary care, its costs and its relationship to teaching and research. If there is tertiary care, there must be that which is primary and secondary. Primary care is delivered principally in physicians' offices and clinics or through community health departments and increasingly involves nurses and other health professionals. The family physician, the internist, the pediatrician and the nurse are most often thought of as the providers of primary care. Other specialists or superspecialists also give primary care, often to patients seen because of a chronic illness in their field of specialization. For example, I periodically visit one of our specialist faculty members for management of hypertensive disease. He also treats me from time to time for minor and transient problems and, thus, is also a primary health care provider. Many regard the family physician as the personification of the provider of primary care, whose objective of maintaining health and treating illness merges into secondary care. Secondary care is directed to the patient who must be horizontal for a time, usually in a community hospital. It is not defined as being of lower quality but as less complex and specialized than tertiary care. Tertiary care is more difficult for me to define but may be best described by some of its characteristics. It is not the exclusive domain of the teaching hospital, but teaching hospitals are characterized by its concentration. First, and perhaps basic to today's discussion, it is costly to deliver and expensive to buy. It tends to be complex, often intensive, and heavily dependent on specialized skills, high technology, research-dependent state-of-the-art. It also depends on a highly specialized nursing and technical staff and on a multispecialty house staff with 24-hour-a-day care. It requires a sophisticated laboratory, radiology department, and other auxiliary services. Patients are usually referred. Half the patients admitted to our University Hospital are referred from outside Onondaga County. Examples of tertiary care include care of patients with severe burns, extensive cancer surgery, neonatal intensive care, transplant surgery, complex diagnostic problems or rare and unusual disease, severe multisystem trauma, cancer chemotherapy, special surgery such as knee joint replacement—this is just a partial list.

Tertiary care may also be defined by economic issues. A smaller community cannot afford the full range of tertiary care services that are usually concentrated in referral centers in larger cities. This impinges on the question of who pays the bill. No reimbursement formula has been devised that supports the care of the very sick in a referral hospital such as ours. In hospitals larger than ours (600 or 700 beds compared with our 360) there is a dilutional effect. First, large hospitals are in more favorable groupings for state-controlled reimbursement calculation. Second, because of their larger size their proportion of high-cost intensive-care patients is lower. More crudely put, they are able to make up on the popcorn what they lose on the peanuts.

Several years ago, our hospital administrative staff studied the costs of caring for a patient with severe burns on the burn unit. This included about 50 hours a day of nursing care for each patient—the equivalent of two nurses on each of their shifts! Our cost was roughly $2,000 a day. Medicaid reimbursement at that time was about $200 a day, about one tenth of the cost of effectively caring for a burn patient.

We can compound this example by other less dramatic instances. The bottom line is that we are subsidized, as are most of the 44 state-operated teaching hospitals in the United States. The average subsidy is about 17%. Ours is lower with a current figure of about 10%. Our budget also differs from those of other teaching hospitals in that it is appropriated by the legislature. Income is not directly applied to hospital operations but used as an offset for appropriated funds to the University. Our expenditures are also largely managed by and subject to approval of executive offices of state government.

Thus, who does pay the costs of education, research, and patient care in our tertiary care hospital? Can one allocate the costs with any precision when these three missions are fused and overlap? Medical students, even in these days of high tuition, do not support the costs of their own education, much less the subsidy of the teaching hospitals. Are the costs to patients high because of a reimbursement subsidy to education and research? This appears to be the common belief, also that we are inefficient and do unnecessary laboratory tests because of research and teaching or because younger physicians order more tests in the hope of being complete or to have answers to all the results that an attending may ask for on rounds. We can find examples of this but do try to reduce them. As I stated previously, tertiary care is highly laboratory dependent. The academic officer may also see hospital operation as a drain on the academic budget, regarding the subsidy as a diversion of funds into an enterprise that should be self-supporting. In part, I agree with them. In this context, patient care (and those who pay for it) is subsidized by a university academic budget. Within the University we now often hear that the health sciences account for 8% of the students and 40% of the budget.

The answers are not clear. The fundamental question remains: Does the high cost of operating a teaching hospital reflect the cost of effective patient care or is the cost of patient care inflated by the costs of education and research? I suspect tertiary care would cost almost as much without the education component, but this is hard to prove. Offhand, I cannot think of a tertiary-care hospital without a residency program. I can't say there are none and there are certainly strong elements of tertiary care in larger community hospitals. There have been some published studies related to the allocation of costs in teaching hospitals. Most indicate that more laboratory tests, more procedures, and more x-rays are ordered. One study on replacement value at the Hartford Hospital,[4] a community-based hospital with high reputation and strong educational programs, attempts to estimate the value of services rendered by students. This study indicated that the same level of service without a teaching program would actually cost slightly more. Residents deliver valuable medical services. Although we now pay them much more than when I was a neophyte physician, where else could we get the services of a graduate physician working up to 80 hours a week for approximately $20,000 a year?

I don't think I've answered Dr. Winkelman's titular questions. I have pointed to some of the problems and have raised other questions. We are subsidized in our hospital operation. The taxpayer pays the bill. I don't know how much is for hidden costs of education and research. If Upstate were reimbursed at the same level as some other teaching institutions in New York and elsewhere in the county, our income would meet operating expenses.

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Who Pays for Hospital Care in the State-Supported Institution?

CHARLES F. CALLIGARIS

The question "Who pays for hospital care in the state supported institution?" can best be answered by first, considering the mission of the institution and second, the role it serves in the delivery of health care services within its service region. The mission of the State University Hospital of the Upstate Medical Center is to provide the best clinical training experience for its students while simultaneously providing the best hospital services at the tertiary care level for its patients. This requires a substantial commitment of resources.

Before we identify who pays for care, let's describe what people pay for. In 1980 expenses of the State University Hospital of the Upstate Medical Center were:

Personal services	$33,000,000
Purchase of supplies, drugs, and minor equipment	20,000,000
Utilities and contract services	1,500,000
Depreciation	2,500,000
Total expenses	$57,000,000

Of this total, $54.5 million were cash expenditures.

Total revenues generated by these expenditures were $53,000,000:

Services to in house patients	$41,500,000
Services to outpatients	11,500,000
	$53,000,000

	Amount	%
Services to patients without third party coverage	$ 4,500,000	8
Services to patients with commercial insurance coverage	8,000,000	15
	$12,500,000	23
Services to patients with Blue Cross, Medicare, Medicaid, and other insurers	41,500,000	77
	$53,000,000	100

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Note that services to patients without third party coverage totaled $4.5 million, or 8% of billings. This sum is due from these patients and their families from their reserves, and we estimate that 40% or more will not be collected whereas the patients with commercial insurance coverage will pay 95% of their published charges. Patients in both categories are responsible for paying for services at the published rates with the only adjustment being attributed to bad debts.

The services to patients with Blue Cross, Medicaid, Medicare, and other coverage are paid at per diem rates determined by the application of various formulae which are, in the case of our institution, less than the sum of the published rates for the services provided to these patients. Our experience in 1980 resulted in payments that were $7.8 million less than the published charges for the services provided.

Let us reconsider our figures to show this experience.

Services to all patients	$53,000,000
Less adjustments and allowance	7,800,000
Net revenues to meet expenditure	45,200,000
Cash expenditures	54,500,000
Cash deficiency	$ 9,300,000

This deficiency was met from appropriations of the State University of New York.

The experience at the State University Hospital of the Upstate Medical Center is similar in most ways with that of other institutions in New York State during 1980. Mr. George Allen, President of the Hospital Association of New York State, stated in a letter to the Health Care Financing Agency of the Department of Health and Human Services that 80% of the voluntary and public hospitals in New York State experienced a financial deficit during the year 1980 and that 45% of the hospitals in New York State incurred losses in each of five years from 1975 through 1979.

We are concerned about these facts. What will happen to our system if this experience continues?

Since 1975 the hospitals in the system have been depleting their reserves to finance these deficits. Since 1975 there has been an erosion of the physical facilities because of the lack of resources to maintain them or upgrade them. This was officially recognized by Governor Hugh Carey when he gave his "State of the Health Message" on February 9, 1982. He reported that "In 1981, $850 million in capital expenditures for health facilities were approved by the Department of Health and that this record amount will leave over half of all hospitals with major or minor structural deficiencies. Over the next several years, we expect to review applications for 4 billions of dollars in hospital modernization and expansion."

It is therefore appropriate to be concerned about our "industry." It is so depleted of capital reserves that the financial integrity of its institutions have already been undermined. Obtaining financing for capital renovation, expansion, and even continuing operations has become difficult if not impossible.

What will happen? We won't know until a satisfactory reimbursement mechanism is established, one that allows recovery of resources consumed to provide services and, to some extent, provides for future capital needs.

The question that I was asked to answer, "Who pays for hospital care in a state supported institution?," could have been answered in three little words: We all do!

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Cost Structure and Fee Schedules in Hospital Laboratories

JAMES W. WINKELMAN, MD

Considerable attention has been recently focused on the finances of the clinical laboratory. This seems proper; at the State University of New York-Upstate Medical Center (SUNY-UMC), it accounts for almost 20% of the patient's total bill. The laboratory is the largest employer, billing entity, and revenue center in the hospital.

Laboratory costs need to be put in the context of total health costs. National health expenditures have risen from $12.7 billion in 1950, to $26.9 billion in 1960, to $74.4 billion in 1970, and to $247.2 billion in 1980.[1] The cost of clinical laboratory testing in 1980 is estimated to have been about $18 billion. Half of that amount was paid for tests done in hospitals at hospital rates. The other half was about equally divided between tests performed in freestanding, generally "for profit" laboratories and physicians' office laboratories.

Fees for laboratory tests performed in hospitals approach two times those for the same tests performed in commercial clinical laboratories. Even though the costs of operation are different and

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greater in the hospital setting, the total billings of the hospital laboratory exceed total expenses by a very large margin. The laboratory, along with x-ray and pharmacy, is made into a "profit center" by hospital accounting practices that have come into being because of a variety of historical factors and regulatory conventions.[2] Those centers offset "cost centers" such as the emergency service, operating room, and acute care units, from which the revenues fall far below the actual costs.

TABLE I. Laboratory Expenses as Part of Total Hospital Expenses*

Expense	$	%
Direct expense as % of total hospital expense†		6.67
Physician renumeration/100 workload units**	4.79	
Direct expense/100 workload units	22.90	
Direct expense including physician reimbursement as % of total hospital expense (calculated)		8.07
Total expense as % of total revenue		58.0
Direct expense as % of total revenue (calculated)		48.0

* Data from *Monitrend Report.*[3]
† Excludes physician reimbursement.
** This will vary widely among institutions based on contractual arrangements for staff pathologists and house staff.

TABLE II. SUNY-UMC Income—1981

Income (Total Billings)	$ (Million)	%
Hospital	50,985	100
Clinical pathology		
Blood bank	965	
Chemistry	5,189	
Hematology	1,407	
Microbiology-immunology	1,264	
Microscopy	403	
Total	9,228	18.1

TABLE III. SUNY-UMC Clinical Pathology Expenses—1981

Expenses	$ (Million)	% of Clinical Pathology Billings	
Direct			
Personnel	1,702		
Capital	250		
Supplies	1,131		
Total	3,083		33.4
Indirect	1,975		21.4
Total all laboratory	5,058		54.8
Total clinical pathology expenses as % of total hospital billings		9.9	
Total clinical pathology expenses as % of total hospital expenses ($57 million)		8.9	

At SUNY-UMC expenses attributable to the clinical laboratories are only about 10% of the total expenses of the hospital. They therefore amount to only about one half of the dollars on the patients' bill that is identified with the laboratory's activity. This ratio of expenses to fees is consistent with the general experience of the many types and sizes of hospitals monitored by the American Hospital Association. Table I interpolates data from 279 general hospitals reporting for the second quarter of 1980. These national numbers compare quite closely with those for SUNY-UMC in 1981 as shown in Tables II and III. Certain "pass through" costs have been extracted from these data. For example, approximately $1.5 million of blood products obtained from the Red Cross are billed to the patient at the laboratory's costs with no added charges. Exclusive of "pass through" the SUNY-UMC clinical pathology laboratory accounts for approximately 18.1% of the billed dollars on the invoices that go to patients, insurance companies, or other third-party payers. But clinical pathology expenses are only 9.9% of total hospital billings and 8.9% of total hospital expenses. This illustrates that there is no necessary and direct relationship between costs actually incurred in the delivery of laboratory service and the fees billed out for those services. This can be understood as an unstated institutional policy that attempts to accommodate the expectations of patients and third-party payers who could not comprehend the very high, true cost of emergency room service, a day of burn care, or other extraordinarily expensive services. Those costs are hidden by being defrayed against other hospital services such as the clinical laboratory.

This anachronistic and potentially prejudicial practice has already had the effect of identifying the clinical laboratory as a target for "cost containment." Nonetheless, laboratory testing has grown inexorably since the early 1950s. Until recently the rate of growth has been estimated at 15% per year compounded. Many laboratorians think that the rate has declined to only 6% to 7% a year for the past five years. Examples abound that illustrate bona fide reasons for the increased use of and dependence on the clinical laboratory over this period. The average appendicitis case or maternity admission at SUNY-UMC in 1951 had five laboratory tests, but in 1971 appendicitis cases averaged 30 and maternity admissions averaged 14 laboratory tests. These laboratory tests were not ordered by laboratories but by practicing physicians. Those clinicians must believe that the additional or new tests improve the caliber of medical care they deliver. Such increased utilization of hard data from the laboratory should not carry with it any pejorative connotation. On the contrary, it is a corollary of improved medical care.

Simultaneous with this impressive increase in laboratory utilization there has occurred a remarkable reduction in the unit cost of laboratory testing. The absolute cost of standard laboratory tests has actually declined over the past 20 years, even in the face of substantial inflation. A blood glucose test done manually 20 years ago was more than ten times more costly than one done today.[4] Laboratory costs have declined relative to other innovative and valuable technologies and relative to certain basic rates that are the largest contributors to the total hospital or medical bill. Table IV shows the increase in overall costs of inpatient hospitalization for medical-surgical beds over the past 12 years at SUNY-UMC. It also illustrates the approximately fivefold greater cost for intensive care and cardiac care beds compared to medical-surgical beds. Table V compares the costs of certain medical services in 1973 with the same services rendered in 1980. Semiprivate room costs increased by 236%. Into that number are folded many of the various services offered in a hospital, making it a good reference for comparison of other specific elements of the total cost. Over the same interval, during which utilization of laboratory tests increased tremendously, the total increase in the cost of the laboratory was only 94%, less than half of the other modalities in the hospital.

Future trends for laboratory testing are, I believe, very easy to predict. There are going to be more tests, with more medical value, at less relative cost. This follows from the indisputable fact that we are in an era of burgeoning scientific medicine. The clinical laboratory is, in a sense, a "final common pathway" through which virtually every worthwhile finding made by medical scientists is transformed into useful information for physicians. It is also the route by which virtually every technological improvement in related disciplines is transformed into the faster and cheaper delivery of that information. There is no reason to believe that these parallel and complimentary trends are going to stop. It was only in 1955 when a medical student at New York University, Arthur Karmen, MD, first observed that the glutamic-oxalic acid transaminase was elevated in the serum of patients with myocardial infarction.[6] That observation opened up a whole new field of specific organ diagnosis by measurement of serum enzymes. Modern medical practice would be unthinkable without many other new laboratory testing capabilities; serologic and cellular immunology; therapeutic drug monitoring; tumor marker testing; viral isolation and identification; peptide and steroid hormone measurement by radio, fluorescent, or enzyme immunoassay; and cytogenetics that exemplify the evolution of scientific discoveries into more laboratory utilization.

Remarkable developments from industry in instrumentation have improved the accuracy and precision of results while lowering the costs.

Given these factors, what might still be done about costs in the clinical laboratory? I submit that one approach that should not be taken is more regulation. Most practicing laboratorians agree that the government has already gone farther than necessary in regulating laboratory personnel and practices and the manufacturers of instruments and reagents. Benefits equivalent to the costs incurred from regulation are hard to prove. Increasing compliance with standards established by the Clinical Laboratory Improvement Act of 1967 has been well documented.[7] However, concomitant improvements in performance, as reflected in average grades in bacteriology or the ability to get glucose results within ±10% of target values are not apparent from the available data.

What should be done by, to, and for the clinical laboratory? Certainly clinical laboratories should continue to develop and perform new tests that improve the practice of medicine. Laboratories should adopt new methods and instrumentation to perform tests better and faster. But in addition, cost control and cost containment should become a recognized, appreciated, and rewarded part of the life of clinical laboratorians.

Unprecedented external pressures from Medicare (Health Care Financing Administration) and the Tax Equity and Fiscal Responsibility Act of 1982 may introduce a new requirement for efficient fiscal management in hospital laboratories. There are several old and new approaches that deserve more

TABLE IV. Average Total Inpatient Costs per Day, SUNY-UMC

Year	ICU and CCU $ Costs/Patient Day*	Medical-Surgical $ Costs/ Patient Day*	% Increase (Medical-Surgical)
1968	...	93	Baseline
1970	...	126	35
1974	...	207	123
1977	...	253	172
1978	1,051	267	187
1979	1,104	285	206
1980	1,702	297	219

* Unadjusted for inflation.

TABLE V. Relative Increases in Components of Hospital Care Costs 1973–1980*

Item	1973 Consumer Price Index†	1980 Consumer Price Index†	Consumer Price Index Increase 1973 to 1980
Semiprivate room	182.1	418.9	+236.8
Operating room charges	179.1	411.8	+232.7
X-ray, diagnostic	131.8	244.4	+112.6
Laboratory tests, routine	122.8	217.3	+ 94.5

* Data from the medical care component of the Consumer Price Index, and *Source Book of Health Insurance Data—1980–1981*.[5]

† All costs (percent increase) indexed against 1967 CPI set at 100%; uncorrected for inflation.

attention. One strategy is cost cutting, pure and simple. Probably very few laboratory directors have painstakingly examined every entry in a chart of accounts to assure that every expenditure is absolutely necessary and at the very best price. This applies to personnel as well as to direct and indirect expenses. A second strategy is selective redefinition of the services that the laboratory provides. A strict cost-benefit analysis of STAT policies, frequency of testing and test availability by shift might yield important savings from efficiencies of volume with negligible impact on the practice of medicine. A third strategy is for the director to reduce utilization by defining which tests will be allowed based on patient by patient consultation, categorization by disease, or other criteria. Pathologists, in particular, are experts in the proper use of the laboratory but usually have managed that resource in a passive mode by attempting to respond to all requests. Another strategy could be reorganization of laboratories by entering into new relationships with other hospitals to save money through shared purchasing and shared or allocated services. Further, hospital laboratories may consider performing work for nonhospital patients or entering into novel relationships with commercial corporations to increase revenue, decrease expenses, or both.

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Medical·Legal Observation

Why Keep Meaningful Medical Records?

A recent decision of the Supreme Court, Appellate Division, Third Department, emphasizes the necessity of physicians to keep meaningful medical records. In Schwarz v Board of Regents, et al, 453 N.Y.S. 2d 836 (July 1982), the Appellate Division, Third Department, upheld a decision of the Commissioner of Education in suspending a physician's license for six months (followed by an 18-month probation). At issue were four cases of termination of pregnancy in which the records contained no information regarding blood pressure, body weight, results of physical examinations, or laboratory test reports. The records were so sparse that the physician was found to have violated 8 NYCRR §29.2(a)(3) which provides that unprofessional conduct includes:

> ... failing to maintain a record for each patient which accurately reflects the evaluation and treatment of the patient. Unless otherwise provided by law, all patient records must be retained for at least six years. Obstetrical records and records of minor patients must be retained for at least six years, and until one year after the minor patient reaches the age of 21 years.

The court stated, "The purpose of the record keeping requirement is, at least in part, to provide meaningful medical information to other practitioners should the patient transfer to a new physician or should the treating physician be unavailable for any reason." In finding that the physician's records failed to provide "objectively meaningful medical information," the court cited that the petitioner's own medical witness, when asked if the physician's record-keeping reflected the evaluation and treatment of the patient, replied that if he were just to look at one of the physician's records, without any explanation or interpretation from the physician, "I don't think I'd get too much information from it."

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Sigmund Freud, Josef Breuer, and Freud's Self-observations on Meralgia Paresthetica

JEROME M. SCHNECK, MD

Sigmund Freud is, of course, known primarily for his development of psychoanalysis. His earlier work in neurology has received far less attention. It is of interest that in 1895 he published an article on meralgia paresthetica in which he described his own symptoms.[1] This is one of the earliest reports on the problem, and for this he deserves appropriate credit. No complete description of it has come to my attention. Freud was aware of the contribution of Bernhardt,[2] whose name is linked with the condition as Bernhardt's disease or syndrome, and Freud revealed also that a previous report by Näcke[3] prompted him to write about himself and his clinical experience.

Of special interest, because of Freud's early personal and professional association with Josef Breuer and the importance this played in his life in general, as well as in the development of psychoanalysis, is an item mentioned by Freud[1] in his report and curiously ignored by his biographer, Ernest Jones, in the latter's meticulous three-volume study of Freud's life and work.[4,5] Freud called his own paresthesias to the attention of Breuer, consulted him for an evaluation based on the latter's general medical experience, and found that Breuer was familiar with the condition. Breuer described for Freud the course of the lateral femoral cutaneous nerve and wondered about damage by pressure of clothing at the waistline, a problem that is in fact apparently causative in some patients, but certainly not in all with this affliction.[1] Breuer, who was older than Freud, was a well-known and respected Viennese physician who became interested in exploring roots of psychologic problems, and whose name is also known in connection with the Hering-Breuer reflex in the physiology of respiration.

Freud's self-observations

Reporting on meralgia paresthetica, Freud mentioned Bernhardt's description, Näcke's self-reference, his own familiarity with the problem for several years, and contact with "five to seven cases." He said of himself that he was 39 years old and had been aware for at least seven years of this disorder affecting the outer surface of his right thigh, the cause of which was obscure. The numbness, almost imperceptible at rest, was more strongly noticeable when walking. He experienced pinpricks or stabbing sensations and distressing sensitivity to the rubbing of clothing against the skin, but suffered no other anatomic or functional problems in the affected leg. Five or six years prior to presenting his own case, Freud was much more bothered by the paresthesias than in recent months, during which time he was not troubled at all. Then Bernhardt's contribution attracted his attention. Areas of the skin of the affected thigh were at times anesthetic, very much more so than during examinations in the past. Any temperature changes that occurred involved a sense of warmth more than of coolness. When writing his report, the affected area was as wide as a hand above the lateral aspect of the knee. Some areas that felt abnormal on occasions seemed normal at other times.[1]

Freud noted, in addition, that one man with this problem complained of very intense pains when walking. Another man attributed his distress to intense emotions evoked by the illness of his son. He experienced bilateral symptoms, and Freud commented that Bernhardt had not observed this type of bilateral finding; it has been recorded since then.[6] He also made the interesting point that his other patients, generally fit but easily frightened, exaggerated to themselves the apparent significance of this problem, voicing heightened concerns. This anxiety on the part of some patients has also been noted by others.[7]

Although, even recently, meralgia paresthetica has been referred to at times as a rare neurologic disorder, Freud had the impression that it was of fairly common occurrence, and the present writer notes Freud's accuracy based on his own reported findings.[7,8] It is present in men and women, yet Freud curiously, concurring with colleagues at that time, observed it only in men, with the exception of a 58-year-old female patient seen by another physician to whose attention Freud had called this nerve affliction.

Comment

Meralgia paresthetica has long been known, and Freud[1] published one of the earliest reports on patients he had seen, as well as self-observations and

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bilateral occurrences. The disorder involves the lateral femoral cutaneous nerve with pain, burning, and numbness or tingling in the lateral or anterolateral aspect of the thigh. Severity of symptoms varies in patients, as well as in the same patient from time to time. It is usually influenced by body position and is often greater standing than when sitting. Hypoesthesia is generally found on examination, and a variety of alleged or apparent causes, including direct or indirect trauma, have been implicated. Claims of etiologic relationships have involved appendectomy, lumbar pain, back injury, and waist constriction.[9] Often the symptoms cannot be accounted for at all. The age range of patients is broad, but it is generally reported in the middle years although my own previously published study revealed its occurrence in a younger age group in military service.[7]

The etiologic origin of meralgia paresthetica in Freud's own case remains obscure. Although he is deserving of credit for one of the earliest published contributions and self-observations, Ernest Jones,[5] in his adulatory biography, and despite his own background as a neurologist, failed to give details of Freud's case, did not mention the specific diagnosis of meralgia paresthetica, did not specifically cite Freud's report in the literature, and, curiously, omitted even mention of the fact that Freud had consulted his friend and collaborator of that period, Josef Breuer. Reasons for Jones's omissions in this respect are a matter of conjecture. They may be based, at least in part, on the conflicts, personality involvements, animosities, and factionalisms in the early history of psychoanalysis and its development.[5,10]

Summary

Sigmund Freud, whose work as a neurologist preceded his better-known role in the development of psychoanalysis, is to be credited with one of the earliest reported descriptions of meralgia paresthetica that also incorporated his self-observations in addition to comments on patients with this disorder. He revealed further, in his report, that he had consulted his friend, colleague, and early collaborator in psychologic studies, Josef Breuer, the well-known Viennese physician, of Hering-Breuer reflex fame, about his symptoms. I am aware of no complete description of Freud's account. Freud's biographer, Ernest Jones,[5] failed to deal properly with this subject in historical perspective and the omission, the reasons for which are a matter of conjecture, may have been based on personality issues and factionalism on the psychoanalytic scene at that time.

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Do ancient and medieval Jewish medical ethics apply in the two articles which follow, today? Dr. Rosner, who has written extensively on Biblical and Talmudic teachings, affirms the need for physicians to be guided by timeless ethical principles.

The Best of Physicians Is Destined for Gehenna

FRED ROSNER, MD,

Judaism has always held the physician in high esteem. Ancient and medieval Jewish writings are replete with expressions of admiration and praise for the "faithful physician."[1–3] Therefore, it is not surprising that the at-first glance derogatory Talmudic statement "the best of physicians is destined for Gehenna" (Kiddushin* 4:14) has generated extensive discussion and commentary throughout the centuries.

The Hebrew epigram *tov sheberofim legehinnom* is variously translated as "the best among physicians is destined to Gehinnom,"[4] "the best among physicians is destined for Gehenna,"[5] "the best of physicians is fit for Gehenna,"[6] "the best among doctors is for Gehenna,"[7] "the best of doctors are destined for Gehenna,"[8] "to hell with the best of the physicians,"[9] and "the best physician is destined to go to hell."[10]

Jakobovits[9] points out that the Talmud does not comment on this epigram at all, which is as significant as it is unusual. Probably the earliest commentary on the Mishnaic assertion that "the best physicians are destined for Gehenna" is that of Rabbi Shlomo ben Yitzchok, popularly known as *Rashi* (1040–1105), who says that the reasons are because a physician "is not afraid of illness, and tells the patient to eat food fit for healthy people, and does not subdue his heart before God, and sometimes causes the death of people, and is able to heal the poor [free] but does not do so" (Kiddushin 82a). Physicians were thus censured for their overconfidence in their craft, which results in their trusting in it, and their haughtiness before God, instead of trusting in Him. They are further blamed for commercializing their profession, to the extent that they sometimes fail or refuse to attend the poor,[6] which may indirectly cause the latter's death.[8] Furthermore, according to *Rashi*, physicians may err in their treatment regimens and thus cause the death of patients. A descendant of *Rashi*, Rabbi Yitzchok Sen, known as *Tosafos Ri Hazaken*, simply states that physicians "cause the death of the patient."

Another Talmudic passage (Aboth de Rabbi Nathan 36:5) states that: "Seven have no portion in the world to come [if they do not conduct their affairs with the utmost caution and sincerity], viz, a scribe, a writer, the best of doctors, a city judge, a diviner, a communal official and a butcher . . . ".

Rabbi Joshua Falk, in his commentary *Binyan Yehoshua* on this tractate, cites the aforementioned *Rashi* verbatim and then adds that he is critical of physicians because the physician treats the patient on the basis of his own knowledge and understanding and does not ask other physicians to join him in his deliberations. In monetary matters the sages state (Sanhedrin 7b) that it is proper to include in the deliberations all those rabbis who understand the case under consideration. If that is the case where money is at stake, how much more so when someone's life is at stake. To save one life one should consult with the whole world, if necessary. Falk continues by stating that there are many well-known and widely disseminated explanations of the phrase "the best of doctors is destined for Gehenna" and concludes "May the Lord save us from their hands." Preuss points out that Falk is only saying what Diodorus asserted about the famous Egyptian physicians: "We wish that we should not have need for any one of them."[10]

Rabbi Menachem ben Shlomo Meiri, known simply as *Mei'ri* (1249–1316), in his Talmudic commentary, opines that "the best of physicians is destined for Gehenna" because "many times he sheds blood because he gives up and doesn't try hard enough in his medical art [to heal the patient]; or sometimes he doesn't know the cause of the patient's illness or how to treat it and considers himself to be an expert."

According to Kalonymus ben Kalonymus (1286–1328), a Provencal writer and philosopher, in his ethical treatise *Even Bochan* (The Touchstone), the epigram "physicians are fit only for Gehenna" refers not to genuine physicians but to quacks because "their art is lying and deception; all their boasting is empty falsehood; their hearts are turned away from God; and their hands are covered with blood."[11]

Friedenwald[6] states that an interesting explanation of this difficult sentence is to be found in Rabbi Solomon Ibn Verga's *Schevet Yehuda* in the course of a discussion between Pope Martin V and Don Samuel Abrabalia and Don Salomo ha-Levi, ambassadors of the Spanish Jews to Rome in 1418. The latter, in answering, said: " 'The best physician is fit for Gehenna', signifies that he should always see

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* All citations, except otherwise stated, are in tractates from the Babylonian *Talmud*.

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Gehenna opened before him should he cause the death of anyone whose health had been entrusted to him. As a consequence he must carefully consider [the treatment] and apply all his thought to it. It is well therefore that he should be mindful that he is destined for Gehenna if he does not give sufficient thought to his patients (*Schevet Yehuda*, chap 41)." Ibn Verga was a physician who lived in Seville in the second half of the 15th century.

Also in the 15th century, Rabbi Simon Duran (1361-1444), in his Responsa *Tashbatz*, part 3, No. 82, believed the Mishnaic epigram sought to castigate only those physicians who maintained their own views in the presence of greater experts and who relied on their own experiments. A similar explanation was given by the Talmudist Rabbi Samuel Edels, known as *Maharsha* (1555-1631), who states that the condemning judgment of going to hell applies to the physician who considers himself to be the best and most expert among physicians and that there is none like him. He relies excessively on his own expertise because of his haughtiness. Sometimes he errs in his understanding of the nature or constitution of a specific patient and causes the patient's death with remedies that are harmful to that patient. Rather, he should consult with other physicians because it is a matter of life and death.

In the following century, Rabbi Jonathan Eybeschutz (1690–1764), in his famous *Kerethi Upelethi* (Section, *Yoreh Deah* No. 188), related the dictum to his theory that the divine sanction of healing applies only to external injuries, whereas attempts to cure internal diseases were deprecated.[9] His contemporary, Rabbi Isaac Lampronti (1678–1756), in his renowned *Pachad Yitzchok*, suggested that the condemnation was aimed at surgeons "because they vary the instructions of the wise [diagnosticians], and, in particular, they exceed, or fall short of, the proper measure when letting blood, according to their limited intelligence, thus killing their patients; and many times have I seen . . . such evil . . . ."

The famous Mishnah commentator Rabbi Yom Tov Lippman Heller (1578–1654), known as *Tosafoth Yom Tov*, and the two prominent commentators on the Jerusalem Talmud (Kiddushin 41a), Rabbi Moses Margoliot, known as *Pne Moshe* (died 1781), and Rabbi David Fraenkel, known as *Korban Ha'edah* (1707–1762), all cite the previously mentioned *Rashi* verbatim. Rabbi Eleazar Fleckeles (1754-1826), in his work *Teshuvah Meyahavah* (section III No. 336), reiterates the interpretation that physicians who are overly confident in their own skills and who profess that "good" (Hebrew: *tov*) or the "best" emanates from them rather than God are the ones to whom the epigram "the best of physicians is destined for Gehenna" is addressed.

In Jacob ibn Habib's famous *Eyn Yaakov*, one finds the commentary of Rabbi Hanokh Zundel ben Yoseph (died 1867), known as *Etz Yoseph*, on the famous epigram about physicians and Gehenna. *Etz Yoseph* asserts the following:

> It appears to me that this statement is not derogatory toward the physician. On the contrary, it is a compliment to an expert physician . . . He who thinks of himself as the most expert physician is destined for Gehenna because through his haughtiness he relies on his imperfect knowledge and doesn't consult with his colleagues . . . also because of his conceit he does not even consider the possibility of his being in error and does not delve adequately into medical books before he administers medicinal remedies. He is, therefore, not sufficiently acquainted with their side effects and does not administer them slowly as is required for dangerously ill patients.
>
> The text of the Mishnah does not say that the doctor is evil or will definitely go to hell. Rather, it states "to Gehenna" which implies that it is in a state of readiness and that by his actions he might go to Gehenna. However, if he conducts himself properly [and consults with colleagues and refers the patient to experts when appropriate] he will, on the contrary, be rewarded and praised [and share in the world to come].

Rabbi Israel Lipschutz, known as *Tifereth Yisroel* (1792-1860), in his Mishnah commentary on Kiddushin 4:14, has nearly identical language as *Etz Yoseph* but also brings a long story to illustrate the meaning of the famous epigram.

Another view is that the dictum of the Mishnah is not directed against healing as such but against the "advanced" views held by physicians in those days.[8] Zimmels[4] suggests that the dictum might have been originally an ancient proverb censuring physicians for counteracting heavenly decrees. Friedenwald[6] offers a Cabalistic philosophical interpretation of the Mishnah by the great Rabbi Loeb of Prague: Gehenna stands for the material world, which according to the doctrine of the Cabalists, is nothing but the negation of real existence, the spiritual. The physician or, in other words, the naturalist, who knows only the material world, will end in Gehenna, in "non-existence" . . . . In the original form of the saying about the physician and the nether world the point made was that even the most skilled physician cannot save himself from death and it read accordingly "The best of physicians has to descend to the dwelling of the nether world."

Both Friedenwald[6] and Jakobovits[9] seem to be convinced that the association of physicians with hell, in its original form, was nothing but a pun, based on the assonance of *rophim*, meaning physicians, and *r'pho'im*, meaning the dwellers of the nether world. Several examples from Scriptures are cited by Friedenwald and Jakobovits to show how easily *rophim* and *r'pho'im* were confused.

Friedenwald[6] also cites a personal communication from H. Malter who wrote:

> The ancient rabbis had foreseen that a time will come when there will be no more rabbis; doctors will replace them. Only doctors and no rabbis will reign; doctors who will cure the eyes, and leave the heart and soul sick, and in a burst of passion and jealousy they scolded these doctors, saying, "the best of the doctors should go to hell."

A novel interpretation of the epigram of the Mishnah "the best of physicians is destined for Gehenna," using the numerical value of the word "best" (the Hebrew word *tov* has the numerical value 17), is that of Rabbi Meir of Przemyslan in his *Margenitha di R. Meir.* The most important part of the daily prayer service is the recitation of The Eighteen (now 19) Benedictions (*Shemoneh Esreh* in Hebrew), known simply as *Tefillah* or prayer. The eighth benediction is a petition for healing for all who are ill, strength for all who are feeble, and relief for all who suffer pain.[12] The benediction begins with the phrase: "Heal us, O Lord, and we shall be healed" and concludes with the phrase: "Blessed art thou O Lord, who healest the sick of thy people Israel." According to Rabbi Meir of Przemyslan, "the best of physicians is destined for Gehenna" refers to those physicians who only believe in 17 of the 18 benedictions in that they do not recognize that God is the true Healer of the ill. Although these physicians may recite all 18 benedictions, if their trust in themselves and conceit in their own medical skills preclude their acceptance of the eighth benediction, which acknowledges God as the trustworthy and merciful Healer, such physicians are considered as "the best" (Hebrew *tov*) and are destined for Gehenna.

A very recent writer offers yet other interpretations of the dictum of the Mishnah[13]. He states that all knowledge is divided into two types: precise, objective, and scientific knowledge, and humanistic, philosophic, and historical knowledge. Medicine is a combination of both precise and imprecise knowledge. A human being is also composed of two parts: a physical body and a spiritual soul, which complement and supplement each other. Manipulation of either body or soul, of necessity, affects the other. On the other hand, no two human beings are alike either in physical features or in body temperaments. If a person is ill, the remedy to cure him may not be the same as the remedy for another individual with a similar illness. Host factors vary from patient to patient. There is thus room for wide variation in efficacy and toxicity of every therapeutic regimen employed by a physician. Therefore, how easy it is for even the best of physicians to unwittingly harm a patient by any given treatment. This is the meaning of "the best of physicians is destined for Gehenna."

Another explanation offered by the same writer[13] is the following: since medicine was traditionally considered to be a praiseworthy profession, many Jewish scholars studied and practiced medicine. The Sages were concerned lest large numbers of the best minds in Israel forsake the study of the Torah to pursue careers in medicine. Hence, perhaps, to discourage this trend, the Sages enunciated the dictum "the best of physicians is destined for Gehenna".

Preuss adds that there is no dearth of other explanations of the famous epigram.[10] In fact, he states that an entire book on the subject was written in 1724 by Reinecke. Two authors, Buxtorf and Schenkel, cited by Preuss, interpret the dictum to mean a general deprecation of physicians, whereas another author (Israels) considers it a vote of censure of physicians who follow Greek philosophy. Finally, Preuss quotes Landau who states that the phrase refers to the sect of Essenes.

Based on many of these interpretations, Jakobovits[9] concludes that "to hell with the best of the physicians" was never understood as a denunciation of the conscientious practitioner. Physicians are among a group of communal servants who have heavy public responsibilities and are warned against the danger of negligence or error. The Talmudic epigram with its curse is thus limited to physicians who are overly confident in their craft, or are guilty of commercializing their profession, or lie and deceive as do quacks, or who fail to acknowledge God as the true Healer of the sick, or who fail to consult with colleagues or medical texts when appropriate, or who perform surgery without heeding proper advice from diagnosticians, or who fail to heal the poor and thus indirectly cause their death, or who fail to try hard enough to heal their patients, or who consider themselves to be the best in their field, or who otherwise fail to conduct themselves in an ethical and professional manner.

May the Lord remove all sickness from this world and heal all those who need physical or spiritual healing. In the meantime, may every physician practice his art with the approach cited in the morning prayers: "Heal us, O Lord, and we shall be healed; save us and we shall be saved; for Thou art our praise."[12]

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Definition of Death In Jewish Law

FRED ROSNER, MD

The first heart transplant was performed in 1967 and raised moral, religious, ethical, and legal problems relating to life and death, and especially the medical definition of death. The rapid advances in biomedical technology over the past two decades have provided the medical profession with life-support and life-sustaining equipment which becloud and make difficult the recognition of death in some patients.[1]

Medicolegal definition of death

Medical and legal definitions of death, although similar in certain respects, differ in others. Even among physicians or medical groups there is neither unanimity of opinion nor uniformity in defining death, and religious definition may be at variance with either those of the medical or legal professions.[2]

The criteria for defining death acceptable to many physicians include complete bilateral pupillary dilatation with no reaction to local constricting stimuli, complete abolition of reflexes, complete cessation of spontaneous respiration, absence of measurable blood pressure, and a flat electroencephalogram.

In 1968, guidelines for organ transplants were approved by the House of Delegates of the American Medical Association, included was the following statement:

> When a vital single organ is to be transplanted, the death of the donor shall have been determined by at least one physician other than the recipient's physician. Death shall be determined by the clinical judgment of the physician. In making this determination, the ethical physician will use all available, currently accepted scientific tests.[3]

How does one ascertain the irreversibility of the process of life? The Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death arrived at the generally accepted definition of irreversible coma which included unreceptivity and unresponsivity, no movements or breathing, no reflexes, and a flat electroencephalogram.[4]

At what point need a physician no longer attempt resuscitation? In 1968 the World Medical Association adopted a statement, which asserted in part that a physician's determination of death "should be based on clinical judgment, supplemented if necessary by diagnostic aids, of which the electroencephalograph is the current most helpful single one." Drafters of the statement admitted its indefiniteness

The artificial heart

The recent implantation of an artificial heart into Dr. Barney Clark has raised many ethical and religious issues in regard to life and death and the "artificial" prolongation of life.

A basic tenet of Judaism is the supreme value of human life. This principle is based in part on the belief that man was created in the image of God. Jewish law requires the physician to do everything in his power to prolong life, but prohibits the use of measures that prolong the act of dying. To save a life all Jewish religious laws are automatically suspended, the only exceptions being idolatry, incest, and murder.

Organ transplantation is a praiseworthy activity in that it provides prolongation of life for most patients undergoing this procedure. Hence corneal, renal, and cardiac transplantation are sanctioned by most rabbis and even mandated by some but with permission of the deceased or next of kin. For kidney transplants, live donors may be used. When cadaver organs are to be used, the organ may not be removed for transplantation until the donor has been pronounced dead.

Euthanasia is opposed without qualification in Jewish law, which condemns any deliberate hastening of death, whether the physician acts with or without the patient's consent. Some Rabbinic views do not allow any relaxation of efforts, however artificial and hopeless, to prolong life. Others do not require the physician to resort to "heroic" methods, but sanction the omission of machines and artificial life support systems that only serve to draw out the dying patient's agony, provided, however, that basic care such as food, good nursing, and psychosocial support is provided. Jewish tradition views death as inevitable and just. It differentiates between the body and the soul, acknowledging resurrection for the former and immortality for the latter. Respect for death is mandated.

The concern for the patient's physical and mental welfare remains supreme to the end, and everything must be done to preserve both. Therefore, the implantation of an artificial heart is consonant with the basic axioms of Judaism relating to the sanctity and infinite value of human life. This sanctioning of such a complex and controversial experimental treatment in Judaism is also predicated on the fulfillment of Jewish principles governing human experimentation, such as the lack of availability of a standard therapy, the expertise of the exeprimental team, the testing of such experimental procedures in animal models, and the reasonable expectation of therapeutic efficacy weighed against the potential risks.

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and stressed that there are neither precise scientific criteria nor a definition for what is the moment of death.

In 1973 the American Medical Association, reaffirmed its opposition to any "inflexible" statutory definition of death. The Conference of Royal Colleges and Faculties of the United Kingdom in 1976 endorsed a document which described in general terms the diagnosis of death and set out detailed diagnostic criteria for establishing when death has occurred in cases where vital functions are being maintained mechanically;[5(p1069)] commenting on the document, an editorial writer[5(p1064)] stated that:

> Some patients who are rescued from impending death after cardiorespiratory arrest are left with a dead brain, artificial ventilation, and a beating heart. Even when mechanical ventilation is maintained, progressive dissolution of the brain, and then of other organs, continues; and the heart will stop beating within a few days. This biological artefact, achieved by technological progress, is the state of brain death.

Because the 1976 document made no reference to organ transplantation, a supplementary memorandum was published in 1979.[6] A brain death protocol appeared a year later.[7] That same year, a BBC television program, *Panorama*, suggested that in Britain, kidneys may on occasion be removed from donors who would otherwise have lived. Much was made of three illustrative case histories from the United States—a man who had been unconscious after cardiac arrest, a woman with drug overdose, and a man with severe accidental injuries—in all of whom brain death was said to have been diagnosed, yet the patients recovered. The recurring motif was, "If the patient wasn't dead when he was wheeled into the operating theatre, he certainly is now".[8] One writer to *The Lancet*, alarmed at the insufficient methods for defining brain death, tore up his donor card.[9] Another pointed out the fact that an isoelectric electroencephalogram (EEG) can occur in hypothermic patients or in those treated with sedative or neuromuscular blocking drugs.[10] Yet another posited the value of the EEG in assessing irreversible coma.[11] Confusion was compounded by the use of terms such as "brain death," "cerebral death," and "brain stem death." The Code of British Practice which requires irreversible loss of brain stem function was firmly defended[12] by some and resoundly criticized by others.[13] In this respect, the much-quoted US Collaborative Study[14] was also strongly criticized.[15]

The controversy generated by the *Panorama* program reached fever pitch and resulted in the cancellation of a sequel program on brain death. Everyone seems to agree that the EEG is not 100% accurate and that flat EEGs can occur in a variety of situations in which the patient survives.[16] Angiography[17] and isotope angiography[18] have been suggested as helpful aids in determining irreversible brain or brain stem death. Thirty sets of criteria for the diagnosis of brain death were recently reviewed.[19] Is it not possible to diagnose brain stem death on the basis of critical criteria alone? Must this diagnosis by reinforced be EEG or angiography, or both?

In the United States, partially in response to pressures from Stanford University Medical Center where most of the world's heart transplants were and continue to be performed, California, in 1976, became the first state to enact a law defining death as brain death, irrespective of whether or not the heart is still beating. To date, at least 26 states have adopted statutory definitions of death based on four different models:[20] (a) the Kansas Model in which alternative means for determining death are acceptable, (b) the Capron-Kass Model in which brain death pronouncements can be made only when heart and lung function are artificially maintained, (c) the American Bar Association Model in which irreversible cessation of total brain function equals death, and (d) the Uniform Brain Death Model which emphasizes irreversible cessation of brain stem function.

Two American medical journals have published review articles on medical, legal, ethical, and public opinion aspects of the definition and criteria of death.[21–22] The President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research has recommended the adoption of a Uniform Determination of Death Act in which a person who has sustained either irreversible cessation of circulatory and respiratory functions, or irreversible cessation of all functions of the entire brain, including the brain stem, is dead.[23] This Uniform Determination of Death Act was developed and approved by the American Bar Association, the American Medical Association, and the National Conference of Commissioners on Uniform State Laws. The law does not specify diagnostic tests or medical procedures acceptable for determining death, leaving the medical profession free to make use of new medical knowledge and diagnostic advances as they become available. The determination of death must thus be made in accordance with accepted medical standards.

Although the original impetus for equating human death with irreversible brain failure was initially stimulated by the rapidly expanding field of organ transplantation, in recent years the need for instituting a single organ (brain) definition of death from a scientific, theologic, and legal point of view has become paramount because of the difficulties surrounding the discontinuance of life-support systems in hopeless patient situations. One should also not confuse brain death and other forms of irreversible brain damage, particularly the vegetative state. Although such patients, best typified by Karen Ann Quinlan, may be thought to no longer function as human beings, bodily life can continue for months or even years. Such individuals are certainly not dead in the medical or biologic sense. How long is one obligated to maintain life-support systems for a brain-damaged person?

When is the dying patient beyond help? When is the physician guilty of a grave moral and religious sin by not doing everything possible to "maintain" his patient? Just as one cannot properly define health as the absence of disease, it seems totally inappropriate to define death as the absence of life. Although society in general and the medical and legal professions in particular are struggling to come up with an acceptable definition of death, it seems desirable to review the Jewish religious definition of death.

Classic definition of death in Jewish law

The definition of death in Jewish law is first mentioned in the fifth century Babylonian Talmud. The Mishnah (Yoma 8:6–7) enumerates circumstances under which one may desecrate the Sabbath:

> . . . every danger to human life suspends the [laws of the] Sabbath. If debris [of a collapsing building] falls on someone and it is doubtful whether he is there or whether he is not there, or if it is doubtful whether he is alive or whether he is dead or if it is doubtful whether he is an Israelite or a heathen, one must probe the heap of the debris for his sake [even on the Sabbath]. If one finds him alive, one should remove the debris but if he is dead, one leaves him there [until after the Sabbath].

The Talmud (*Yoma* 85a), commenting on the above Mishnah, states as follows:

> . . . How far does one search [to ascertain whether he is dead or alive]? Until [one reaches] his nose. Some say: Up to his heart . . . life manifests itself primarily through the nose as it is written: *In whose nostrils was the breath of the spirit of life* (Genesis 7:22) . . .

The biblical and Talmudic commentator *Rashi* explains that if no air emanates from his nostrils, he is certainly dead. *Rashi* further explains that some people suggest the heart be examined for signs of life, but the respiration test is considered of greatest import.

The Palestinian Talmud (Yoma 8:5) quotes certain authorities who require "until one reaches the navel" but this is a minority viewpoint.

This rule from the Mishnah is codified by Maimonides as follows:

> If upon examination no sign of breathing can be detected at the nose, the victim must be left where he is [until after the Sabbath] because he is already dead . . . .[24]

The famous Code of Jewish Law by Joseph Karo, known as *Shulkhan Arukh*, states:

> Even if the victim was found so severely injured that he cannot live for more than a short while, one must probe [the debris] until one reaches his nose. If one cannot detect signs of respiration at the nose, then he is certainly dead whether the head was uncovered first or whether the feet were uncovered first.[25]

Neither Maimonides nor Karo seems to require examination of the heart or navel, both mentioned as minority opinions in the Babylonian and Palestinian Talmuds, respectively. Cessation of respiration seems to be the determining physical sign for the ascertainment of death.

Another pertinent passage found in Karo's Code states as follows:

> If a woman is sitting on the birthstool [ie, about to give birth] and she dies, one brings a knife on the Sabbath, even through a public domain, and one incises her womb and removes the fetus since one might find it alive.[25]

Rabbi Moses Isserles adds to this statement:

> However, today we do not conduct ourselves according to this [rule] even during the week [ie, even *not* on the Sabbath] because we are not competent to recognize precisely the moment of maternal death . . . .

Several commentators explain that Isserles is concerned that perhaps the mother only fainted and incising her abdomen might kill her. Maimonides, five centuries earlier, had already raised the problem of fainting complicating the recognition of death when he stated:

> . . . whosoever closes the eyes of the dying while the soul is about to depart is shedding blood. One should wait a while; perhaps he is only in a swoon . . . .[26]

However, both Maimonides and Isserles agree that the Talmudic description of death for all practical purposes is the absence or cessation of respiration. We are not primarily concerned with the extremely rare case of someone recovering from what appears to be the deceased state. Such an example is described in the Talmud (Semachot 8:1). Rather, Jewish law follows the rule of the majority.

Recent rabbinic writings on definition of death

Recent rabbinic opinions support the classic Jewish legal definition that death is established when spontaneous respiration ceases. Since respiration was thought to be dependent on cardiac activity, the definition would thus include absence of a heartbeat. Such an opinion was first expressed by Rabbi Moses Schreiber[27] who asserts that if a person is motionless like an inanimate stone and has no palpable pulse either in the neck or at the wrist, and also has no spontaneous respiration, his soul has certainly departed, but one should wait a short while to fulfill the requirement of Maimonides (*vide supra*) who was concerned that the patient may only be in a swoon. Rabbi Sholom Mordechai Schwadron[28] states that if any sign of life is observed in limbs other than the heart and lungs, the apparent absence of spontaneous respiration is not conclusive in establishing death.

On the other hand, Rabbi Isaac Yehuda Unterman, stated that one is dead when one has stopped breathing. Thus, most Talmudic and post-Talmudic Sages agree that the absence of spontaneous respiration is the only sign needed to ascertain death. A minority would also require cessation of heart action. Thus a patient who has stopped breathing, says Unterman, and whose heart is not beating, is considered dead by Jewish law.

Rabbi Eliezer Yehuda Waldenberg[29] also defines death as the cessation of respiration and cardiac activity. One must use all available medical means to ascertain that respiratory and cardiac functions have indeed ceased. A flat electroencephalogram in the face of a continued heartbeat is not an acceptable finding by itself to pronounce a patient dead. Even after death has been established one should wait a while before moving the deceased. Rabbi Waldenberg cites a work entitled *Divrei Shaul* in which the author states that "It is clear to me like the sun that if we observe a patient and he appears dead, and has no respiration and no heartbeat which are the signs of life as explained in tractate Yoma, he is not alive any more and has the [legal] status of a dead person in all respects." Rabbi Waldenberg also discusses the issue of whether the seat of the soul resides in the heart or in the brain and cites Rabbi Zvi ben Yaakov Ashkenazy, known as *Chacham Tzi* (Responsum No. 77) who pointed out that this issue has been argued since the times of Galen, whose opinion was that the brain is the source of life, and Aristotle, who considered the heart to be more important than the brain.

Rabbi Moses Feinstein[30] states that if the brain is not functioning, death will occur because breathing will stop. Until the latter occurs, physicians may be able to resuscitate the patient, or prayers to God may avail. Hence, if one kills someone with no brain function who is still breathing, it is murder. The Talmud and Codes of Jewish law do not indicate, continues Feinstein, that the signs of life are in the brain, and it is illogical to say that the nature of man changed since, even in Talmudic days, the brain controlled all life-sustaining functions (ie, respiration) and, yet, cessation of brain activity was not considered to be the definition of death. In a patient without spontaneous respiration or heartbeat but with some electrical activity on an electroencephalogram, the rare possibility of resuscitation must be reckoned with. Although the respiration test is paramount, it is clear that "the nose is not the organ which gives life to a human being, nor is it the organ of respiration; rather the brain and the heart give life to man." The nose is the easiest place to recognize the presence of this life, concludes Feinstein, since a very weak pulse may not be detectable and brain activity is not easily measured on physical examination alone.

In a personal communication in 1967 a similar conclusion was expressed by Rabbi Immanuel Jakobovits who stated in part, that "The classic definition of death as given in the Talmud and Codes is acceptable today and correct. However, this would be set aside in cases where competent medical opinion deems any prospects of resuscitation, however remote, at all feasible."

Rabbi Aaron Soloveichik, in a very novel approach, states that death is a process that begins the moment spontaneous respiration ceases and ends when all bodily functions emanating from the controlling center, ie, the brain, end. This means that:

> When a person in whom death is imminent becomes devoid of respiration but other bodily functions such as the brain are potentially operative, such a person is no longer completely alive but he is not yet dead: death has begun but the death process is not complete until the brain and heart completely cease to function. During this period, a person is in a state of semi-living, not fully alive but not fully dead. Anyone who kills such a person or who hastens his death is, therefore, guilty of murder. This is the reason why Maimonides rules that one is not allowed to move a dying person while his soul is departing until after one waits awhile. Maimonides refers to a person who is motionless and who has no spontaneous heartbeat or respiration. One must wait half an hour because his brain may still be operative and the patient potentially resuscitable. This "dying" person is in a semi-living state and, therefore, one is prohibited from doing anything which may hasten his death.[31]

Rabbi J. David Bleich[32] traces the Jewish legal attitude concerning the definition of death from Talmudic through recent rabbinic times. He posits that brain death and irreversible coma are not acceptable definitions of death insofar as Jewish law is concerned since the sole criterion of death accepted by Jewish law is total cessation of both cardiac and respiratory activity. Even when these indications are present, there is a definite obligation to resuscitate the patient, if at all feasible. Bleich[33] also discusses the various time of death statutes already enacted into law in many states in this country and statutes being contemplated by other states. These statutes supplant the classical definition of death with more flexible criteria. Bleich voices concern about the fact that it is unlikely that Jewish opinion can succeed in stemming the legislative tide indefinitely. It is also unrealistic to believe that time-of-death statutes will accurately reflect even the most liberal of Jewish legal opinions. He expresses hope that civil and religious liberties be preserved by writing into such statutes a provision allowing for exemption from legislated definitions of death for reasons of conscience.

Several Jewish physicians,[34–37] well-versed in Talmudic law and rabbinic writings, have written in detail about the Jewish legal definition of death.

They conclude that today one requires all three criteria cited by Rabbi Moses Schreiber[27] (*vide supra*), namely (1) absence of spontaneous respiration, (2) absence of a heartbeat in a patient who appears dead, and (3) is "motionless like an inanimate stone."

Rabbi Moses David Tendler[38] introduced the concept of brain stem death as an acceptable criterion for the definition of death even if cardiac function has not ceased. Tendler points out:

> . . . that absent heartbeat or pulse was *not* considered a significant factor in ascertaining death in any early religious sources. Furthermore, the scientific fact that cellular death does not occur at the same time as the death of the human being is well recognized in the earliest biblical sources. The twitching of a lizard's amputated tail or the death throes of a decapitated man were never considered residual life but simply manifestations of cellular life that continued after death of the entire organism had occurred. In the situation of decapitation, death can be defined or determined by the decapitated state itself as recognized in the Talmud and the Code of Laws. Complete destruction of the brain, which includes loss of all integrative, regulatory, and other functions of the brain, can be considered physiological decapitation and thus a determinant per se of death of the person.
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> Loss of the ability to breathe spontaneously is a crucial criterion for determining whether complete destruction of the brain has occurred. Earliest biblical sources recognized the ability to breathe independently as a prime index of life . . . destruction of the entire brain or brain death, and only that, is consonant with biblical pronouncements on what constitutes an acceptable definition of death, i.e., a patient who has all the appearances of lifelessness and who is no longer breathing spontaneously. Patients with irreversible total destruction of the brain fulfill this definition even if heart action and circulation are artificially maintained.[39]

Thus, according to Tendler, if it can be definitely demonstrated that brain stem death, not cerebral cortex or "brain" death, but actual brain stem death, has occurred, then the patient is legally dead in Jewish law because he is equated with a decapitated individual whose heart may still be beating but whose brain stem is irreversibly "dead." Brain stem function can be evaluated medically by evoked potential studies, isotope flow investigations, angiography, and caloric studies.

The Tendler position that "complete and permanent absence of any brain-related vital bodily function is recognized as death by Jewish scholars" is supported by a recent responsum of Rabbi Moses Feinstein.[40] The latter states that if by injecting a substance into the vein of a patient, physicians can ascertain that there is no circulation to the brain, meaning no connection between the brain and the rest of the body, then that patient is legally dead in Judaism because he is equivalent to a decapitated person. Where the test is available, continues Feinstein, it should be used.

Tendler's arguments generated considerable discussion[41] and controversy. Rabbi Aaron Soloveichik[42] attacked the Tendler position as a serious misinterpretation of Jewish law, an attack refuted by Tendler himself.[43] An opposing viewpoint on brain death[44] asserted that "cessation of total brain function, whether irreversible or not, is not necessarily linked to total destruction of the brain or to the death of the person. Further, to take vital organs or to otherwise treat people as though they were dead already on the basis of these recent criteria is morally unacceptable to most Orthodox Jews and Christians". This firm criticism of Tendler's thesis was somewhat tempered by an accompanying editorial[45] and a response by Veith and Tendler.[46] However, Tendler maintains his position that total and irreversible cessation of brain (stem) function as determined by the Harvard criteria or their more recent modifications is equivalent to total destruction of the brain and, hence, tantamount to functional or physiologic decapitation, a condition that most lay and religious ethicists—and indeed most persons—can equate with death.

Conclusion

Guidelines for the determination of death continue to be proposed, discussed, and debated.[47,48,49] It is axiomatic in Judaism that human life is of infinite worth. The taking or the shortening of a human life is, therefore, ethically wrong and constitutes an act of murder. "When does life end" is an issue presently being actively discussed.

All rabbis agree that the classic definition of death in Judaism is the absence of spontaneous respiration and heartbeat in a patient with no bodily motion. A brief waiting period of a few minutes to one-half hour after breathing has ceased is also required. In the present era, when it is recognized that hypothermia or drug overdose can result in depression of the respiratory center with absence of spontaneous respiration and even heartbeat, this classic definition of death is insufficient. Hence, wherever resuscitation is deemed possible, no matter how remote the chance, it must be attempted. Cerebral death is not generally accepted by rabbinic scholars to be a criterion for establishing death other than to confirm death in a patient who already has irreversible absence of spontaneous respiration and no heartbeat. The only exception may be the situation of decapitation where immediate death is assumed even if the heart may still be briefly beating. Irreversible brain stem death as evidenced by sophisticated medical testing is the Jewish legal equivalent of decapitation and is presently a matter of intense debate in rabbinic circles.

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Ogilvie's Syndrome

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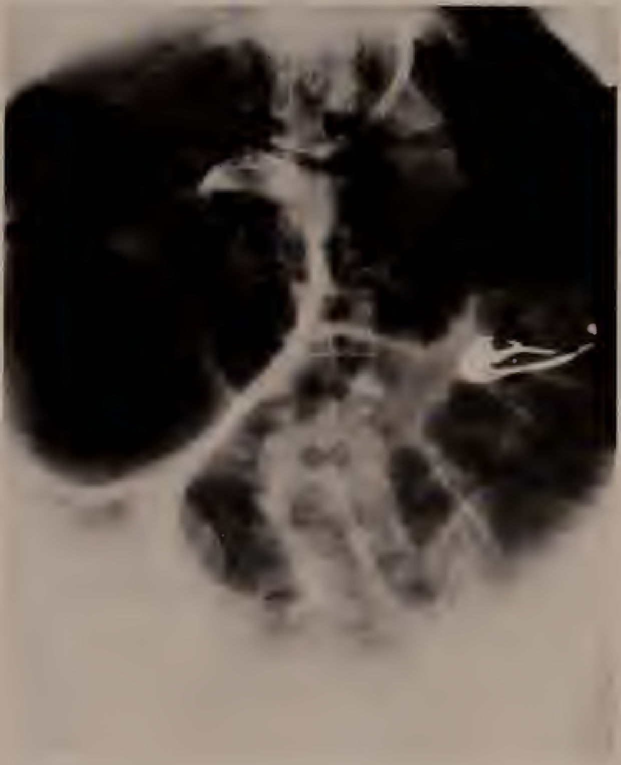
Sir Heheage Ogilvie in 1948 called attention to a peculiar condition characterized by massive colonic dilatation suggesting mechanical obstruction but in which no organic obstruction could be demonstrated.[1] Although Leithauser[2] described six similar cases 30 years before, the condition is popularly called Ogilvie's syndrome. Although not rare, it is uncommon, and unless diagnosed and treated properly may lead to perforation and death. The following case has been selected to illustrate the typical pattern.

Case report

A 40-year-old woman because of poor progress of labor underwent cesarean section without incident. Two days after operation she developed abdominal discomfort and some distention was noted. The following morning she became more distended and a nasogastric tube was inserted and parenteral fluids given. A rectal tube gave minimal results. No abdominal pain or tenderness was present. By day 4 she was greatly distended with poor bowel sounds but did not appear ill. Her temperature at this point was 99.8° F, pulse 100, and the WBC count unremarkable. Results of sigmoidoscopy to 22 cm were negative and unproductive of flatus. A flat film of the abdomen revealed the cecum to be 14 cm in diameter (Figure). Barium enema revealed a cut-off at the splenic flexure. Because the cecum now measured 14 cm in diameter, no attempt was made to force barium beyond this point. A presumptive diagnosis of pseudo-colon obstruction was made and the patient was taken to the operating room. The tenia of the cecum and ascending colon had split but not perforated and tube cecostomy was performed with immediate relief of dilatation. At exploration no cause for the obstruction could be found. Her postoperative course was complicated by a possible pulmonary embolus requiring intubation and intensive support, but she recovered completely. During this period and follow-up as an outpatient there has been no recurrence, and interval barium enema revealed a normal colon.


Flat film of abdomen showing Cantor tube in place. Cecum measures 14 cm in diameter.

Discussion

The fundamental etiology of pseudo-colon obstruction is unknown although Ogilvie felt his first case was due to interference with the sympathetic nervous system secondary to involvement of the celiac plexus by cancer. Soreide[3] reviewed all reported cases through 1975, and although he failed to find an acceptable common demoninator, in 90% of the 157 cases there was an associated extraintestinal illness or system derangement preceding the onset of colon distention. Bachulis and Smith,[4] reporting on 35 cases of their own found blunt trauma in 11 and surgical trauma in 19 that preceded the onset of colon obstruction. Eleven of the 35 cases were fractures of the pelvis or hip and two were cesarean sections. Adams,[5] chronicling 20 cases, found four with fractured hips and one with pelvic fracture. Reports appeared in 1977[6,7] discussing the discovery of elevated prostaglandin E (PGE) levels in small-bowel

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pseudo-obstruction and the favorable response to PGE antagonists with reduction of PGE plasma levels and resolution of the obstruction. Also, many of the reported pseudo-obstruction cases are associated with pregnancy, with its known elevation of prostaglandin levels; because the prostaglandins are so ubiquitous, further investigation of their possible relationship to the syndrome is indicated. Pseudocolon obstruction also has been found following or associated with vascular reconstructions, retroperitoneal hemorrhage, alcoholism, sepsis, pancreatitis, renal failure, electrolyte imbalance, lead intoxication, cardiac failure, scleroderma, drug abuse, hypothyroidism, central nervous system disorders (brain tumor, parkinsonism, multiple sclerosis, stroke), and the idiopathic group in which no demonstrable derangement exists. Considering the disparate conditions reported with this entity and the failure to demonstrate a common etiologic thread, it is possible that diverse mechanisms may be responsible.

Clinical presentation. The single most striking clinical feature is rapid onset of abdominal distention, which may be massive, developing over one to three days without nausea, vomiting, abdominal pain, or significant tenderness. There may exist the paradox of flatus with mild diarrhea concomitant with increasing abdominal distention. Nasogastric suction usually produces only small amounts of fluid with negligible gas. Laboratory studies are not helpful and if abnormal, results usually reflect the associated extraintestinal disease. Essential to diagnosis is the abdominal flat film, which reveals massive colonic dilatation, usually without the fluid levels seen in organic obstruction and with an abrupt cut-off in the gas patterns at the hepatic, splenic, or sigmoid flexures. Of significance is that gas may at times be visible in the colon distal to this cut-off point.

Management. The initial approach is nonsurgical if the patient is seen early and the physician understands the clinical significance of the colonic dilatation. Passage of a nasogastric tube, correction of any fluid or electrolyte deficiencies, and treatment of any associated major systemic disorders should be instituted immediately. Sigmoidoscopy or careful colonoscopy may allow passage of a long rectal tube for deflation. If the obstruction is relieved, the patient must be followed carefully by serial x-rays and continued medical management to be sure the obstruction does not recur. If these methods are unsuccessful, a gentle barium enema to demonstrate passage beyond the cut-off point and thus a patent colon lumen would be helpful. During the early stage of medical intervention it is essential that serial abdominal x-rays be taken with attention not only to cecal diameter but also to rapidity of change from previous films. Perforation generally occurs first in the cecum, following Laplace's law, and numerous investigators have suggested various cecal diameters as the limit for medical management. Lowman and Davis[8] suggested 9 cm, Lescher et al[9] 12 cm, and Greenlee et al[10] seemed content to treat conservatively cecal diameters to 20 cm. Most authors would discontinue medical management at 12 cm and perform laparotomy. Remember that even though barium may pass into the proximal colon, perforation with its attendant complications may still occur. In the absence of nonviable bowel, perforation is one of the few remaining indications for performing tube cecostomy, which provides adequate decompression. Following resolution of the colonic dilatation, barium enema to rule out any associated pathologic condition may be accomplished and then the cecostomy tube may be removed. Interestingly enough, the condition does not seem to recur.

Summary

Ogilvie's syndrome, although characteristic in clinical presentation as a form of ileus, is not a specific disease but rather seems to be a complication of associated or major-system disorder. The exact role of elevated prostaglandins as observed in some reported cases awaits further clarification. Some guidelines for management have been presented.

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Ischemic Enteropathy

A rare cause of small-intestinal obstruction

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Acute colitis and chronic stricture are recognized complications of vascular insufficiency of the large intestine. Although the syndrome of intestinal angina is well described, ischemic enteritis and ischemic stricture of the small intestine are rare and often overlooked causes of intestinal obstruction. A review of 300 patients over 65 years of age with bowel obstructions did not include a single case of ischemic etiology.[1] Two such patients, however, have recently been encountered and are reported here.

Case reports

Case 1. An 80-year-old man was admitted to the New York Hospital with three weeks of anorexia, constipation, and 10-lb weight loss associated with intermittent crampy abdominal pain, vomiting, and watery diarrhea. Past medical history included a myocardial infarction, cerebrovascular accident, congestive heart failure, hypertension, Parkinson's disease, and chronic bronchitis. Medications included furosemide, digitoxin, triamterene and hydrochlorothiazide (Dyazide), methyldopa, and carbidopa-levodopa (Sinemet). He had no previous abdominal surgery or gastrointestinal symptoms.

He appeared emaciated and was afebrile. The abdomen was mildly distended but nontender. Bowel sounds were normal. Rectal examination disclosed nothing remarkable. On admission, the white blood count and hematocrit were normal. Liver function test results and erythrocyte sedimentation rate were normal. The serum amylase value was 152 (upper limit of normal = 140 Somogyi units/dL). Plain x-ray films of the abdomen showed dilated small intestine, consistent with ileus or partial obstruction (Fig 1).

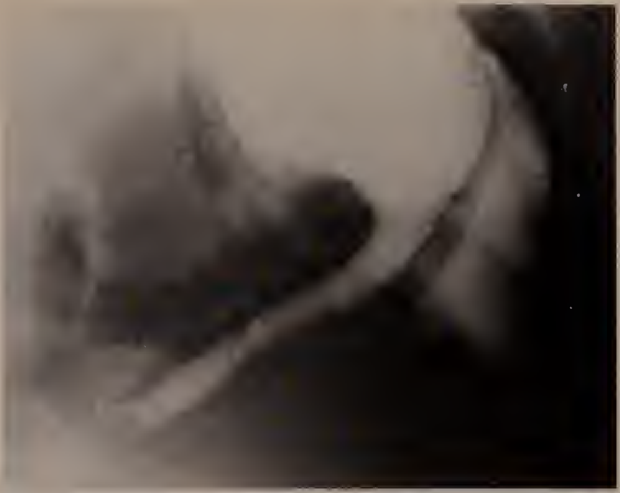

FIGURE 1. Case 1. Enlargement of small intestinal radiograph demonstrates stricture.

On the sixth hospital day, the patient became febrile to 38.3°C with leukocytosis (23,300/μL) which responded to broad-spectrum antibiotics over several days. Proctoscopy and a barium enema demonstrated sigmoid divertuculosis. An upper gastrointestinal series showed diffuse dilatation of the jejunum and a narrowed segment of small intestine in the right lower quadrant. Sonography demonstrated cholelithiasis and possible choledocholithiasis.

At laparotomy, a 14-cm long segment of ileum was resected. In this region the serosa was darkened and the wall was thickened and partially necrotic; the mesentery was normal. The mucosa contained longitudinal ulcerations, and valvulae conniventes were absent. The small intestine was dilated proximally and collapsed distal to this point. A cholecystectomy and cholangiogram were also performed for chronic cholecystitis and cholelithiasis. Microscopic examination of the resected ileum was interpreted as "ischemic enteropathy." The postoperative course was uncomplicated.

Case 2. A 62-year-old man was admitted to the New York Hospital with five days of diffuse, crampy abdominal pain, nausea, anorexia, and constipation. He had no prior abdominal complaints or surgery. A myocardial infarction occurred 16 months before admission; coronary angiography showed three-vessel disease and severe left ventricular dysfunction. Current medications included isosorbide dinitrate (Isordil), procainamide hydrochloride (Pronestyl), furosemide, and nitroglycerin ointment (Nitropaste). The patient's father had died of a cerebrovascular accident and two younger brothers had myocardial infarctions.

The patient was afebrile. The abdomen was soft with mild distention and slight tenderness across the hypogastrium. Bowel sounds were normal. The stool was guaiac negative. Complete blood count, results of renal and liver function tests, and serum amylase value were all normal. Plain x-ray films of the abdomen demonstrated small-intestinal obstruction. A barium enema revealed sigmoid diverticulosis; an upper gastrointestinal series dilated small intestine with a 12-cm long stricture in the ileum was seen (Fig 2).

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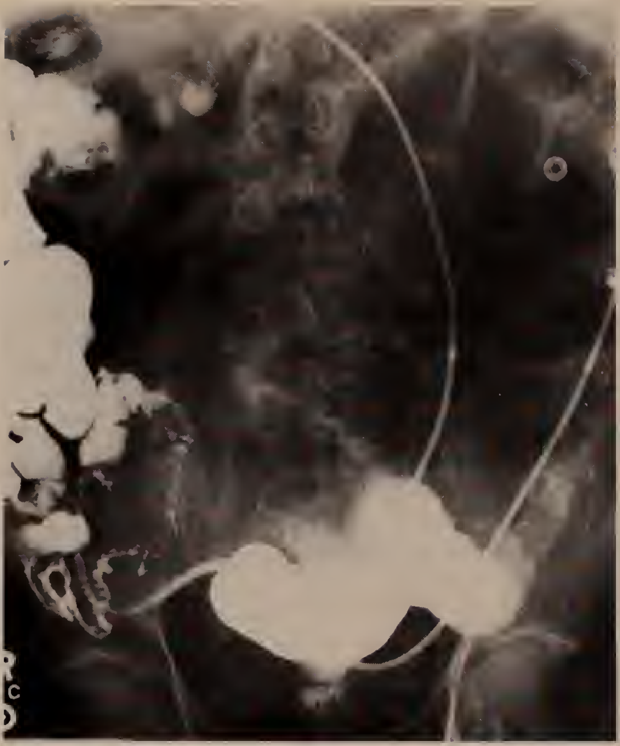

FIGURE 2. Case 2. Upper gastrointestinal series demonstrating stricture of distal ileum.

At laparotomy, a 15-cm long segment of strictured ileum and normal mesentery was resected. A longitudinal ulcer with extensive mucosal necrosis and inflammation and focal involvement of the submucosa was found. The pathology report interpreted these changes as consistent with ischemia. Postoperatively, the patient's intestinal obstruction was relieved and recovery was uncomplicated.

Discussion

Vascular insufficiency involving the small vessels of the ileum is occasionally seen after surgical correction of aortic coarctation or as a mainifestation of a primary systemic arteritis such as Takayasu's arteritis, periarteritis nodosa, systemic lupus erythematosis, or rheumatoid vasculitis.[2] Radiation-induced intestinal strictures are also due to a segmental obliterative arteritis. Although regional enteritis can produce a similar radiographic and pathologic picture, old age and absence of any prior history or systemic disease made this diagnosis unlikely. Clinical syndromes of arteriosclerosis involving the gastrointestinal tract, however, usually are limited to the colon[3] or origins of the superior mesenteric artery or celiac axis.[4] The striking history of arteriosclerotic vascular disease in these two patients enabled several consultants to make the correct clinical diagnosis prior to pathologic confirmation.

The type of lesion that follows embolic or thrombotic ischemia of the small intestine depends on a variety of local factors and has been well described.[5] Typical infarction with gangrene, perforation, and peritonitis is common. However, a less severe insult characteristically produces ulceration of the mucosa along the length of the affected segment, due to the higher oxygen requirement and cell turnover rate of the mucosa relative to other layers of the intestinal wall. If during the acute stage perforation or peritonitis do not occur, the accompanying submucosal edema and hemorrhage may be responsible for proximal small-intestinal obstruction. Healing of the infarcted area with fibrosis can then produce a long stricture and chronic intestinal obstruction long after the acute insult. Such a sequence of events was well illustrated in a case reported in 1955 by Rosenman and Gropper.[6]

As patients with arteriosclerosis are enabled to live longer due to advances in medical science, it would be expected that more cases of ischemic enteropathy will become clinically apparent. Early diagnosis is important because small-intestinal resection is curative and prevents the consequences of prolonged debility and malnutrition which can be confused with malignant conditions in this group of patients. Clinical suspicion should be aroused by a history of severe vascular disease in other organs. Also, successful treatment of acute intestinal ischemia, by surgical or nonoperative means, may be followed by obstruction secondary to stricture in as few as three months. However, patient survival will probably be determined by arteriosclerosis in vessels supplying the heart and brain.

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Cerebellar Ataxia in Systemic Lupus Erythematosus

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Cerebellar findings in systemic lupus erythematosus (SLE) are extremely rare and in the few reported cases are associated with signs of brain stem dysfunction.[1,2]

We are reporting a patient with SLE who suddenly developed gait ataxia and whose computed tomograph (CT) scan revealed the presence of cerebellar atrophy.

Case report

A 56-year-old black woman came to the neurology service complaining of difficulty with balance.

The patient was well until 1954, when a butterfly rash in the face, skin discoloration, alopecia, and Raynaud's phenomena in the upper extremities led to the diagnosis of discoid lupus erythematosus. She was treated with prednisone and azathioprine and her symptoms improved. In 1967 she experienced transient numbness and weakness on the left side of the body which cleared completely. In 1977 she developed an exacerbation of her skin symptoms and a skin biopsy revealed the presence of severe vasculitis. At the same time her ANA and anti-DNA antibody titers were grossly elevated and a diagnosis of SLE was entertained. She was restarted on prednisone and her skin symptoms improved. In June 1981, during her regular clinic visit, she complained of heat intolerance, palpitations, loss of weight, and fatigue of two months' duration. She was noted to be hyperthyroid, was treated with radioactive iodine and became euthyroid. In August 1981, while on prednisone, 10 mg daily, she noticed a sudden onset of loss of balance. On examination she was found to have truncal ataxia without limb dysmetria. The patient staggered and could not walk in a straight line. A CT scan showed evidence of diffuse early cerebellar atrophy with prominence of the fourth ventricle as well as of the superior vermian cistern and the superior cerebellar folia (Figure). At this time her ANA titer was 1:160 while the anti-DNA antibody titer as well as C_3 and C_4 were normal. Lumbar puncture showed an opening pressure of 150 mm CSF, no cells, a protein content of 37 mg/dL and glucose of 69 mg/dL. The patient's gait subsequently improved without any treatment and she was left with only minimal residual difficulty in straight walking.

Comment

The sudden onset of loss of balance with difficulty in walking a straight line in the present case suggested cerebellar involvement which was confirmed by CT scan. The history as well as the clinical and laboratory findings suggested that SLE was the probable cause of the symptoms. Other causes of cerebellar dysfunction can be excluded by a negative family history, absence of any known exposure to toxic substances, alcohol, or drugs such as phenytoin (Dilantin), or history of epilepsy.

Although involvement of the central nervous system is very common in SLE, cerebellar dysfunction has rarely been described and only in association with brain stem findings.[1,2] No case of isolated cerebellar involvement in CNS has been described in more recent clinical or pathological studies.[3,4] In recent reviews[5–8] of CT scan findings in patients with CNS involvement by SLE no cerebellar lesions were described.

In the present case the sudden onset of the cerebellar findings with a subsequent improvement suggest a vascular etiology. The CT scan findings do not correspond to a particular arterial territory but rather showed a diffuse atrophy mainly in the cerebellar vermis. A similar radiologic picture of a rather diffuse atrophic process involving the cerebral hemispheres was one of the most common findings in CNS lupus.[1–4] The mechanism of this atrophic process has not been adequately studied and remains unknown. It can be speculated that a similar process may occur as an isolated phenomenon in the cerebellum in some cases of central nervous system SLE. Further studies correlating anatomic and radiologic data should be undertaken to ascertain the true incidence of this process.

Summary

We describe a patient with systemic lupus erythematosus who developed cerebellar ataxia. Computed tomography revealed cerebellar atrophy. Cerebellar findings have been described in central nervous system involvement by SLE but always in association with other neurologic findings. To our knowledge, this is the first case of SLE-associated cerebellar atrophy documented by CT.

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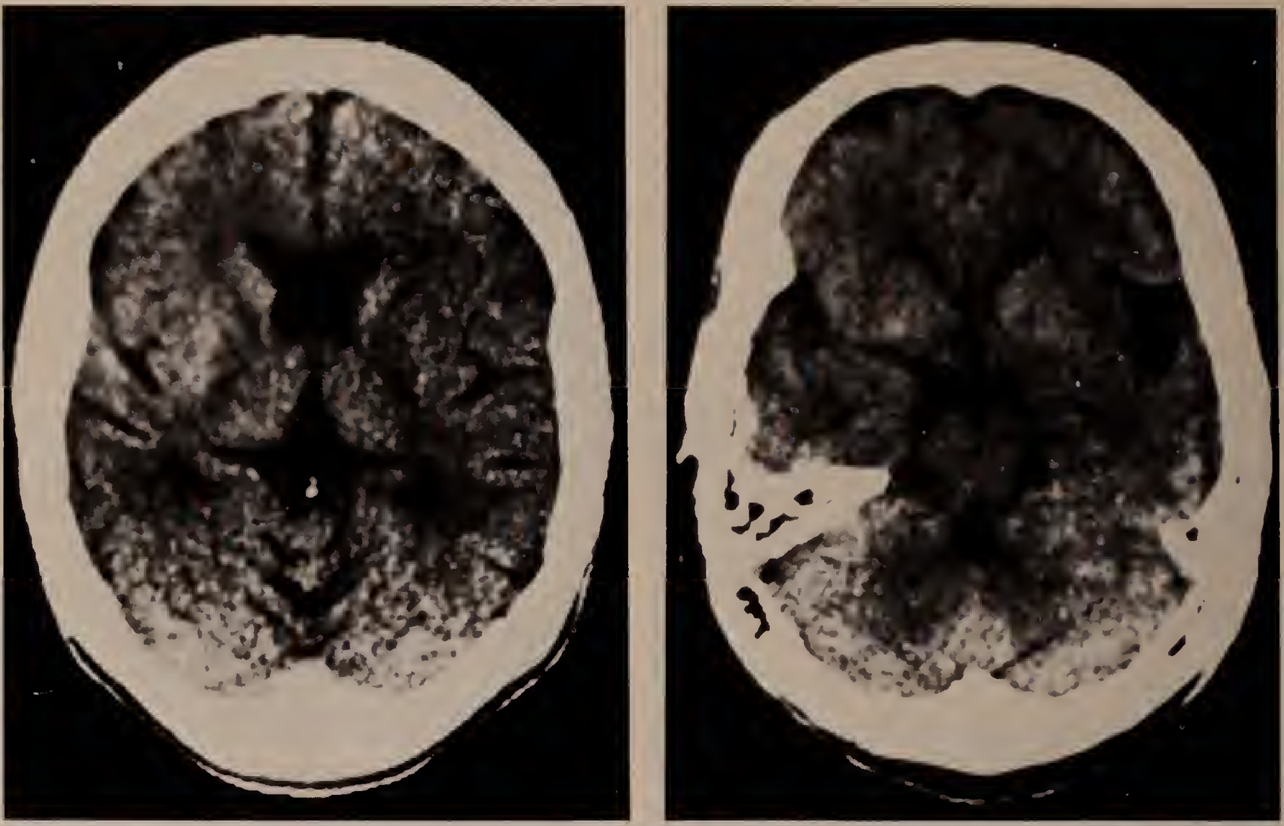

Noncontrast CT scans. Left: Prominent sulci and cerebellar folia of the vermis. Right: Enlarged fourth ventricle.

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Leukocytoclastic Vasculitis in an Intravenous Heroin Abuser

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A young intravenous substance-abusing woman developed a leukocytoclastic vasculitis manifested by pericarditis, cardiomyopathy, pulmonary interstitial fibrosis, an inflammatory pleural effusion, and severe hemolytic anemia which have responded to steroid therapy. Her disease was characterized serologically by very high titers of rheumatoid factor and circulating immune complexes.

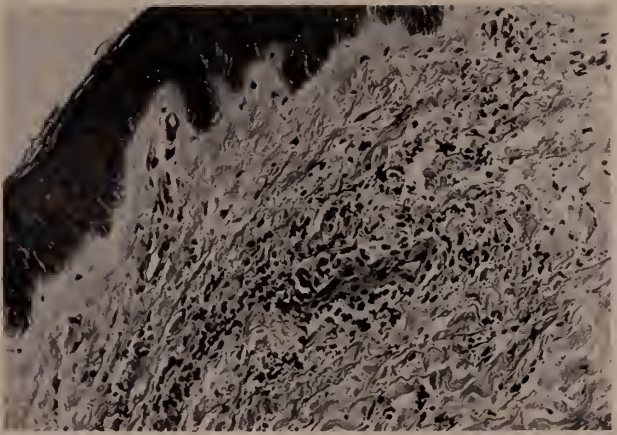
It is suggested that the use of intravenous narcotics may have been causal in establishing a small vessel angiitis mediated by circulating immune complexes.

Case report

A 28-year-old woman who abused multiple intravenous substances, including heroin, was admitted to the North Central Bronx Hospital in April 1980 with a productive cough, fever, and pleuritic chest pain. Two months previously she had experienced an episode of painless jaundice. A liver biopsy at that time showed diffuse lobular inflammation with microgranulomas composed of histiocytes and variable numbers of neutrophils and eosinophils. There was moderate portal inflammation but no piecemeal necrosis. These changes were suggestive of a drug hypersensitivity reaction and were not felt to be characteristic of chronic active hepatitis. Antimitochondrial antibodies, anti-smooth muscle antibodies, and hepatitis B surface antigen were negative. The jaundice resolved within six weeks and the patient was discharged.

On admission she was febrile to 103° with rales in the left chest. Heart sounds were normal and no murmur was heard. A sputum culture and four blood cultures grew *Klebsiella pneumoniae*. Cardiac and peripheral stigmata of endocarditis were absent. After a 10-day course of cephalosporin, she remained afebrile; however, her hematocrit fell to 22% with a 10% reticulocyte count. Both the direct and indirect Coombs' tests were positive. Indirect immunofluorescent assays for antinuclear antibody (FANA) were negative on numerous occasions, and anti-ds-DNA antibodies were within normal limts at 1.9 U/mL (nl <3.00) and a hemagglutination test for anti-Sm and anti-RNP antibodies was negative. A test for hepatitis B surface antigen was again negative. The latex test for rheumatoid factor was positive at a titer of 1:5,120. The antistreptolysin O titer (ASLO) was positive at 1:2,500 Todd units. Cold agglutinins were positive at 1:32, and total serum hemolytic complement activity (CH50) was markedly diminished at 23 hemolytic units (normal = >150 units).

The patient left the hospital against medical advice and was readmitted. Two weeks later, she noted increasing dyspnea. There was a small pulsus paradoxus, fine rales at the base of the right lung, dullness at the base of the left lung, and diminished heart sounds; an apical systolic murmur was heard. A purpuric skin rash was present on the lower extremities. A chest x-ray showed a globular heart, a left-sided pleural effusion, and a fine interstitial infiltrate in both lower lung fields. An echocardiogram showed a pericardial effusion. The hematocrit was 20%, with a 15% reticulocyte count, and the peripheral blood smear suggested brisk hemolysis. A bone marrow aspirate showed absent iron stores and mild megaloblastic changes. Blood cultures were negative on six separate occasions. The urine was without blood or protein. A protein electrophoresis of serum showed increased gamma globulins without a monoclonal spike. Cryoglobulins were not detectable, but the Clq binding assay was 48% (nl <10%) indicative of high titers of circulating immune complexes. In this test the first complement (Clq) is radioactively tagged with ^{125}I and is added to alequots of serum. The ^{125}I Clq that is bound to immune complexes or aggregated immunoglobulins is separated from unbound ^{125}I Clq by precipitation with polyethylene glycol. A skin biopsy showed a leukocytoclastic vasculitis (Figure) with IgM deposited in a linear and granular pattern along the epidermal basement membrane. A diagnostic thoracentesis produced straw-colored fluid with 3,500 WBC/mm^3, of which 50% were neutrophils and 50% were lymphocytes. The pleural fluid complement was 70 hemolytic units and rheumatoid factor in the pleural fluid was positive at a titer of 1:10,240. Pulmonary function testing showed moderate to severe restrictive lung disease. A Swan-Ganz catheterization disclosed a markedly elevated pulmonary capillary wedge pressure of 30 mm Hg with CV waves suggesting severe mitral regurgitation.


Biopsy of skin demonstrating leukocytoclastic vasculitis. The vessel wall is necrotic and many intact and fragmented polymorphonuclear leukocytes are present. (Hematoxylin-eosin, ×125.)

The patient was treated with prednisone, 40 mg daily, and intravenous doses of digoxin and furosemide. She underwent a brisk diuresis and a marked improvement in her respiratory status. On steroid therapy, her hematocrit rose to 37%, and her reticulocyte count decreased to 2%. Her skin rash remitted completely. Repeat pulmonary function tests showed improvement in her restrictive lung disease. It was felt that the improvement in her congestive failure was not adequate to explain the improvement in her pulmonary function testing and that the change in her pulmonary tests was more likely due to steroid therapy.

One year later, the patient was in very satisfactory condition on 10 mg daily of prednisone. Her hematocrit was 37%. The titer of rheumatoid factor remained elevated at 1:2,560.

Comments

During the course of our patient's illness, we considered several possible etiologies for her leukocytoclastic vasculitis: infective endocarditis, hepatitis B, essential mixed cryoglobulinemia, and connective tissue disease. However, for reasons discussed later, we do not believe that any of these disorders were responsible in this case for the development of the observed small-vessel angiitis. We, therefore, suggest that her vasculitis was secondary to her narcotic addiction.

Infective endocarditis has been associated with both vasculitis and circulating immune complexes. In this disease state, there is fairly strong evidence to indicate that the immune complexes are involved in the pathogenesis of the vascular damage. Several studies[1,2] have reported high levels of circulating immune complexes in a large percentage of patients with subacute infective endocarditis. High levels have specifically correlated with extravalvular manifestations of the disease. A characteristic histologic aspect of the Osler's nodes found in subacute infective endocarditis is the presence of a necrotizing vasculitis of the glomus body. A leukocytoclastic vasculitis has also been observed in patients with infective endocarditis.[3,4] This is a small-vessel multisystem vasculitis similar to that seen in systemic lupus erythematosus (SLE) with widespread dermal-epidermal and vessel-wall immunoglobulin deposition. After successful treatment of the endocarditis with antibiotics, a concomitant improvement in extravalvular manifestations and a fall in circulating immune complexes with a rise in serum hemolytic complement activity have been observed. In our patient, however, successful treatment of her presumed endocarditis did not alter the course of her vasculitis or change the level of circulating immune complexes.

Hepatitis, accompanied by hepatitis B surface antigenemia and circulating immune complexes, has been associated with several cases of polyarteritis nodosa.[5–7] Our patient was at no time positive for hepatitis B surface antigen. The majority of patients with essential mixed cryoglobulinema present with a leukocytoclastic angiitis, accompanied by high titers of rheumatoid factor and depressed hemolytic complement activity. While our patient had some of the features of this condition, studies for cryoglobulins were negative on three occasions. Lastly, both rheumatoid arthritis and SLE may develop a multisystemic leukocytoclastic vasculitis. However, our patient had none of the typical features of rheumatoid arthritis and none of the characteristic serologic features of SLE.

There have been a number of papers linking drug abuse with the development of a medium- and large-artery vasculitis.[8–10] In addition, Bayer has reported circulating immune complexes in 40% of intravenous narcotic abusers without signs of endocarditis, hepatitis B, or active vasculitis.[1] However, no studies to date have reported a concurrence of small-vessel vasculitis, drug abuse, and high levels of circulating immune complexes as in our patient.

We suggest that the chronic antigenic stimulation of repeated abuse of intravenous substances allows the development of circulating immune complexes. These complexes may, in certain as yet unspecified instances, form the basis for a disseminated vasculitis process. In order to identify which addicts may be at risk for the development of a small-vessel vasculitis, we urge that (1) addicts with high titers of circulating immune complexes be followed prospectively to see which subgroup goes on to develop a vasculitis, and (2) small-vessel vasculitis be more carefully sought in drug addicts with peripheral and systemic complications of their drug abuse.

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Recurrent Subacute Thyroiditis: A report of three cases

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We would like to report three subjects who had three well-documented episodes of subacute thyroiditis separated by periods of 10, 12, and 14 years. We have found only a single reference to this occurrence in the literature (Cutler[1]), in which a patient had reported a painful neck 30 years prior to a second documented episode.

Case 1

On April 28, 1967, a 38-year-old Chinese-American woman was referred for a painfully swollen thyroid gland of five days' duration several weeks after she had had an upper respiratory infection. The thyroid was approximately two and one half times normal size. The right lobe was lobular, and the entire gland was exquisitely tender. No radioiodide was present in the thyroid gland at 24 hours. There was no history of excessive iodide ingestion. The patient was euthyroid by clinical criteria. She responded promptly to prednisone, with loss of all symptoms and signs. The drug was then tapered and was discontinued after a month. On August 4, 1967, she was still euthryroid and the 24-hour uptake of radioiodide was 55%, the high value attributed to rebound. On April 3, 1968, thyroxine iodine by column was 5.2 μg/dL (normal, 2.9 to 6.4 μg/dL).

The patient remained well until she again presented with a painfully swollen thyroid on November 29, 1979. The gland was again approximately two and one half times normal size, and the right lobe was lobular. She also complained of headache, arthralgias, and nervousness. The serum thyroxine (RIA) was 14.8 μg/dL. Vital signs were normal. The radioiodide uptake was 3.5% at 24 hours. Once again, there was an excellent response to prednisone, which was discontinued after a month. By January 24, 1980, all systemic and local symptoms and signs had disappeared and the thyroid was just palpable. The 24-hour uptake of radioiodide was 38.7%, and the serum thyroxine was 7.6 μg/dL. On April 26, 1980, the serum thyroxine was 6.8 μg/dL, and the radioiodide scan revealed a normal bilobed thyroid gland.

Case 2

In September 1966, a 36-year-old woman was referred for pain and tenderness in her neck of approximately two weeks' duration following an upper respiratory infection. The thyroid was tender, asymmetric, and soft, with a nodule in the medial part of the right lobe. The 24-hour uptake of radioiodide was 4.6%. Following a course of salicylates, the patient made a complete recovery. In October 1966, the 24-hour uptake of the radionuclide was 18%, and the scan was compatible with a nontoxic goiter.

The patient remained well until January 1976, when she developed a painfully swollen thyroid gland and fever a few days after a large aphthous ulcer appeared on her lip. Tachycardia, warm, moist palms, tremulous hands, increased nervousness, and an unusually forceful heartbeat were also present. The thyroid was firm, tender, and enlarged two to three times normal size. Two distinct nodules were felt in the right lobe. Serum thyroxine was 20.2 μg/dL, and T_3 was 190 ng/dL. Antibodies to thyroid microsomes and antithyroglobulin were not elevated. The 24-hour uptake of radioiodide was 1.3%.

In April 1976, following a course of propranolol and acetaminophen, she was asymptomatic. The thyroid gland was palpable but not enlarged or tender. Radioiodide studies disclosed a 24-hour uptake of 39%, and the scan revealed a normal bilobed thyroid gland.

Case 3

In August 1966, a 50-year-old female presented with tenderness of the right lobe of the thyroid gland radiating to the right ear. The 24-hour uptake of radioiodide was 4% above background. On scan, the barest outline of the thyroid gland was visible. Following a course of salicylates, the patient was symptom free and the 24-hour uptake was 16%. The right lobe contained less radioiodide than the left. In March 1967, the thyroid gland and the protein-bound iodine PBI were normal.

The second episode occurred in June 1980, with a predominantly tender left lobe of the thyroid with radiation to the left ear. The 24-hour radioiodide uptake was 2%. Following a course of salicylates, recovery was complete. The 24-hour uptake of radioiodide was 34.5%. An asymmetric thyroid was noted on scan.

Comment

The clinical and laboratory features of subacute (de Quervain's, acute nonsuppurative, giant cell)

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thyroiditis are well-known (Woolner et al,[2] Ingbar and Woeber,[3] DeGroot and Stanbury,[4] and Volpe[5]) and usually consist of a history of an antecedent upper-respiratory infection followed in two to four weeks by various degrees of pain and tenderness throughout an enlarged thyroid gland; occasionally, the signs are confined to one lobe. In some instances (Hamburger[6]), tenderness may be minimal or absent. Constitutional symptoms of malaise and fever are commonly present. Although characterized by recurrent symptoms for as long as two years, these episodes are regarded as exacerbations of a single protracted inflammatory process. Glucocorticoids and salicylates may provide dramatic relief from systemic and local symptoms and signs but are not thought to alter the duration of the illness, since all features return to the immediate pretherapy levels when they are discontinued prematurely. Recovery of thyroid gland function is usually sufficient to ensure euthyroidism. Since recurrences of subacute thyroiditis are rare once a thyroid gland has recovered from a bout of subacute thyroiditis, another episode is highly improbable.

Recently, recurrent episodes of painless thyroiditis and hyperthyroxinemia have been reported (Greenfell et al,[7] Walfish and Green,[8] and Nikolai,[9]) but this is a different process, an autoimmune phenomenon with biopsy revealing lymphocytic thyroiditis. On the other hand, subacute thyroiditis may be "painless" in patients with a high threshold to pain or if the illness is mild. Since no biopsies were obtained, we cannot rule out the possibility that the thyroid pathology in our cases may have been lymphocytic thyroiditis, but the clinical presentations of pain and constitutional symptoms make this diagnosis improbable.

In each of our subjects the two episodes of thyroiditis were similar and short lived.

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Dissecting Aneurysm in a Patient With Pseudocoarctation of the Aorta

SHELLEY NAN WEINER, MD
ROBERT G. BERNSTEIN, MD
MICHAEL SHAPIRO, MD

Pseudocoarctation, or nonobstructive coarctation, of the aorta probably represents an extremely mild form of adult coarctation in which there is no significant pressure gradient across the coarctation, no collateral circulation, and no rib notching.[1–3] The radiographic appearance of pseudocoarctation is fairly typical. On a PA chest x-ray, there is a soft tissue mass in the left superior mediastinum, which represents the high, elongated aortic arch. The aortic arch is displaced anteriorly, and there is a double convexity of the aorta. The aorta is usually dilated both above and below the kink. Some of the cardiac anomalies associated with true coarctation of the aorta, such as bicuspid aortic valve, patent ductus arteriosis, and subaortic stenosis, are also seen in patients with pseudocoarctation of the aorta.[1,3–5] Patients with coarctation of the aorta also have an increased incidence of dissecting aneurysms.[6–8]

We recently saw an interesting patient with pseudocoarctation of the aorta, a bicuspid aortic valve, and a dissecting aneurysm of the ascending aorta. To our knowledge, only one other case of a dissection in a patient with pseudocoarctation of the aorta has been reported.[9]

Case report

A 48-year-old white male presented to another hospital, having complained of a sudden onset of severe chest pain and collapse. On admission, he had a supraventricular tachycardia of 120–130 and a blood pressure of 85 systolic. His chest x-ray showed a widened mediastinum. An attempt at trans-

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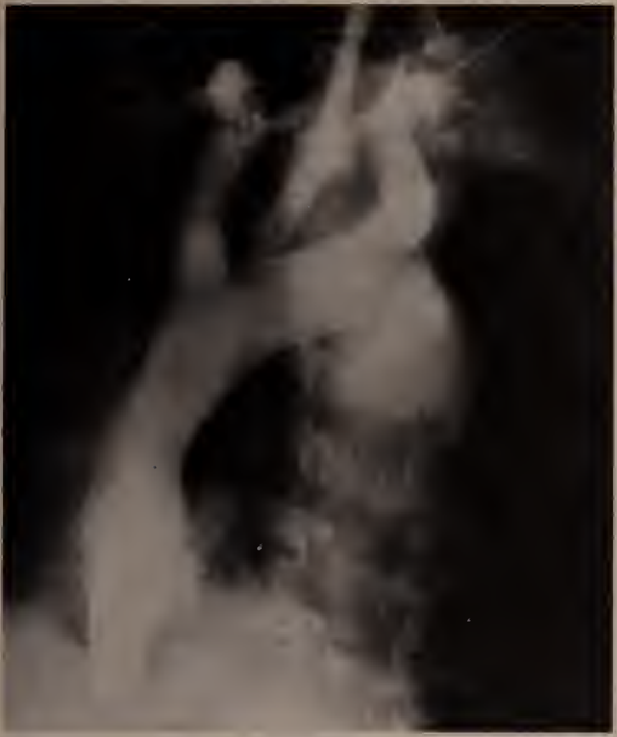

Fig 1.—RPO arch aortogram. The true lumen is filled with contrast. The false lumen is not yet opacified. The great vessels are not involved in the dissection. There is a kink in the aorta just below the left subclavian artery.

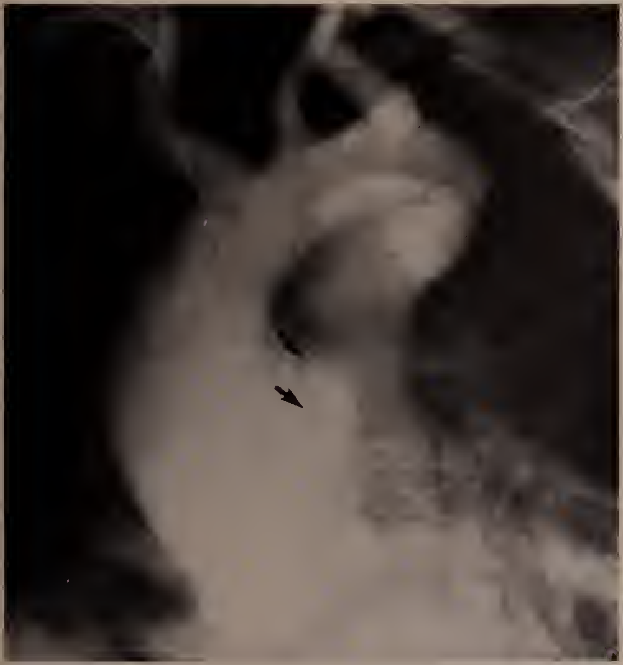

Fig 2.—AP arch aortogram. Both the true and false lumens are filled. An intimal flap is seen in the inner aspect of the arch (black arrows). The pseudocoarctation just below the left subclavian artery is well demonstrated.

femoral aortography was unsuccessful, and the patient was transferred to our hospital for the evaluation of a dissecting aneurysm.

Past medical history included peptic ulcer disease and long-standing hypertension. On admission to The Hospital of the Albert Einstein College of Medicine, the chest x-ray again showed a widened mediastinum. On physical examination, he had a blood pressure of 85 systolic and a pulse of 120. His axillary and femoral pulses were equal and strong. The popliteal and dorsalis pedis pulses were absent.

Arch aortography via a right transaxillary approach was performed, demonstrating a De Bakey type II dissection and a pseudocoarctation (Figs 1, 2). The patient was taken immediately to surgery, where he was found to have bicuspid aortic valve, a type II dissection ending just below the innominate artery, pericardial tamponade, and a pseudocoarctation of the aortic arch. He underwent an aortic valve replacement, replacement of the ascending aorta, and reimplantation of the coronary arteries.

His postoperative course was complicated by one episode of renal failure, which responded to medical therapy, and a left cerebrovascular accident. He was discharged three months later to a Veterans Hospital for physical and occupational therapy. At the time of discharge he was on Coumadin, digoxin, and propranolol inderal.

Comment

In 1972, Smyth and Edwards[2] stated that pseudocoarctation is a variant of true coarctation. They believe that there is both a morphologic and a historical similarity between these two entities. In addition, the congenital cardiac anomalies associated with coarctation and pseudocoarctation are similar. The increased incidence of dissecting and saccular aneurysms with coarctation is well accepted.[4,6–8,10] There have been several reports of saccular aneurysms occurring in patients with pseudocoarctation,[9,10] but to our knowledge, only one other case[9] of a dissecting aneurysm in a patient with pseudocoarctation of the aorta has been reported.

The increased incidence of dissecting aneurysm with true coarctation may be related to hypertension, cystic medial necrosis of the aorta, and aortic stenosis secondary to a bicuspid aortic valve.[6] Most dissections associated with true coarctation are in the proximal segment and may be accompanied by rupture and hemopericardium,[4,6,8] as was seen in our patient.

Our case, once again, illustrates that pseudocoarctation of the aorta is not always a benign entity. Some of the complications that occur with true coarctation may also be seen with pseudocoarctation.

Acknowledgment. The author wishes to thank Robert Frater, MD of the Department of Cardiovascular Surgery, for referring this patient to the Department of Radiology.

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Extraosseous Osteosarcoma

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Extraosseous osteosarcoma is an uncommon, aggressive malignant tumor. Surgical resection is advocated for early lesions, but effective therapy for widespread disease is lacking. We report a patient whose metastatic pulmonary nodules appeared while chemotherapy was being administered.

Case report

A 62-year-old woman noticed a small, painful lump on the medial part of her left thigh. In the four weeks before she sought medical attention, the mass increased from golfball size to a 7-cm mass. During this period, she developed steady, boring pain which radiated down to the popliteal fossa, but she denied any other symptoms. Her past history was significant for malignant condition of the right maxillary sinus diagnosed following an antrectomy 9 months earlier. The histopathology of the maxillary lesion was squamous cell carcinoma with poorly differentiated spindle cell areas. An initial fractionated course of 6,000 rads cobalt-60 was followed two months later by radical maxillectomy. The tumor was found to extend into the bone, but the margins of resection were free of tumor and she never manifested recurrence.

On physical examination, the patient appeared much older than her stated age. She had an obvious facial deformity resulting from the previous maxillectomy but no signs of local recurrence of tumor. Positive physical signs were otherwise limited to the left lower extremity. The skin overlying the 7 × 7 × 5-cm mass within her medial thigh was unremarkable. The mass was firm but not hard, and moderately tender to palpation. The mass appeared fixed to the adductor muscles, but not to the adjacent femur. The left calf was 3 cm larger in girth than the right, but there was no pitting edema. Distal pulses and superficial veins of both lower extremities were unremarkable; no abnormalities of motor or sensory nerve function to the lower extremities could be demonstrated. There was no adenopathy.

Results of routine laboratory tests, including serum alkaline phosphatase, were unremarkable and chest x-ray films did not suggest metastases. Left thigh films demonstrated calcifications within the tumor mass. A bone scan showed intense uptake of the isotope by the mass, as well as slightly increased activity at the site of the recent right maxillectomy. The work-up to this point suggested either a second tumor, probably a soft-tissue sarcoma, or perhaps an unusual metastatic lesion from the maxillary squamous cell carcinoma. A biopsy was recommended to provide a definitive diagnosis before proceeding with further investigation or therapy.

An incisional biopsy was performed under general anesthesia through a 5-cm longitudinal incision centered over the lesion. The mass was homogenous, gray, and cut with a gritty sensation. Microscopic sections revealed a highly malignant-appearing mesenchymal tumor containing areas of malignant osteoid, bone, cartilage, and fibroblastic tissue (Fig 1). There was no evidence of other tissue differentiation such as muscle or fat; this excluded the diagnosis of malignant mesenchymoma. The mitotic rate was extremely high, averaging 5 to 10 per high-power field in cellular areas. Regions of necrosis were present. The histopathology was that of an osteosarcoma. Based on mitotic rate, cellularity, and pleomorphism, the tumor was classified as a high-grade sarcoma.

Full-lung tomograms and an isotope liver-spleen scan revealed no metastatic disease. An arteriogram demonstrated superficial femoral artery encasement

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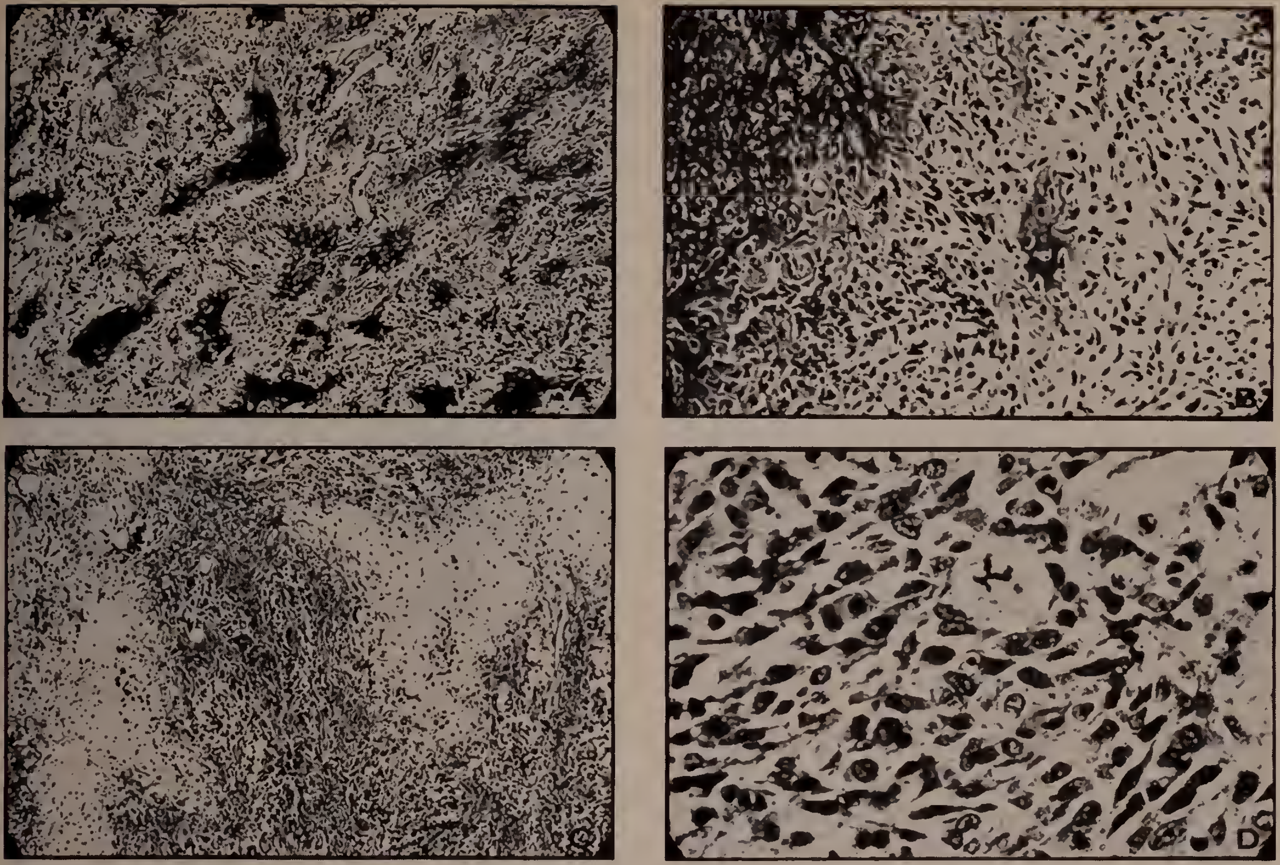

FIGURE 1. (A) Spicules composed of partially calcified osteoid and malignant osteoblasts separate sheets of primitive mesenchymal cells. (B) Osteoid lies between tumor cells (left). Darker areas are calcified osteoid, while lighter areas are noncalcified osteoid. (C) Regions of chondroid differentiation are evident. (D) In undifferentiated areas tumor cells are pleomorphic with nuclear hyperchromasis and nucleoli. Mitotic rate is high with abnormal forms present. (Hematoxylin-eosin.)

by the tumor, as well as tumor neovascularization (Fig 2).

The tumor was deemed to be resectable. The tumor's size, location, and femoral artery encasement, however, precluded a simple wide local excision. En bloc tumor resection involving the medial thigh tissue (including the adductor muscle group, femoral artery, and possibly a segment of the femur), coupled with a limb salvage procedure with immediate arterial reconstruction, was discussed by the tumor board. A consensus existed that the patient was physiologically too elderly and feeble to tolerate a massive resection, lengthy reconstruction, and the required postoperative rehabilitation. Hip disarticulation was felt to offer the best alternative for disease control, but this was adamantly rejected by the patient. Therefore, a combined approach of chemotherapy and radiotherapy was elected.

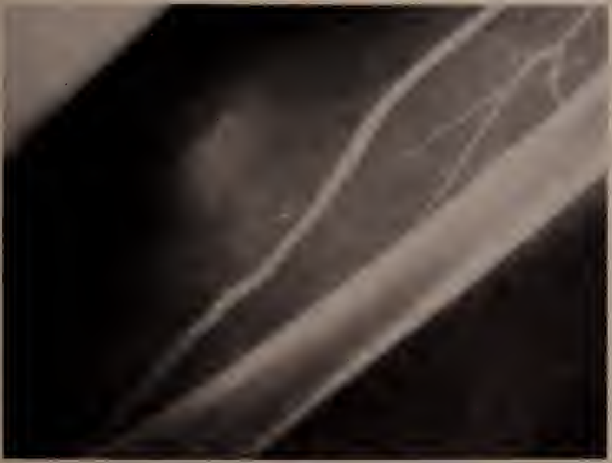

FIGURE 2. Arteriogram demonstrates tumor blush as well as narrowing of arterial lumen in vicinity of thigh mass.

Doxorubicin (Adriamycin) was administered in two 100mg doses three weeks apart, along with 2 mg of vincristine sulfate (Oncovin) with the second dose. Temporary leukopenia and severe frontal sinusitis followed and further chemotherapy was withheld. A 5,700-rad fractionated course of cobalt irradiation was administered to the left thigh over a six-week period. There was no objective beneficial response to either the chemotherapy or radiotherapy. As a matter of fact, the left thigh mass increased in size by

1 cm and the patient developed bilateral pulmonary nodules during the therapy. Her condition inexorably deteriorated and she died three months after the initial biopsy. In spite of suspected widespread metastatic disease, serum alkaline phosphatase activity remained within normal limits until her death.

At autopsy, a 9-cm, hard, multilobulated tumor was found in the soft tissues of the left anteromedial thigh (Fig 3). The mass was not attached to the subadjacent bone or periosteum. The femoral vessels passed through the deep aspect of the tumor. Metastatic extraosseous osteosarcoma was found in both lungs, the small intestine, the intestinal mesentery, the heart, and the thyroid. The tumor mass in the right lung was 6 cm in diameter and occluded the right mainstem bronchus; bilateral acute bronchopneumonia was present. The histology of the primary and secondary tumors at autopsy was identical to the specimen obtained at the initial thigh biopsy. There was no evidence of residual squamous cell carcinoma of the maxilla, nor of any squamous cell metastases.

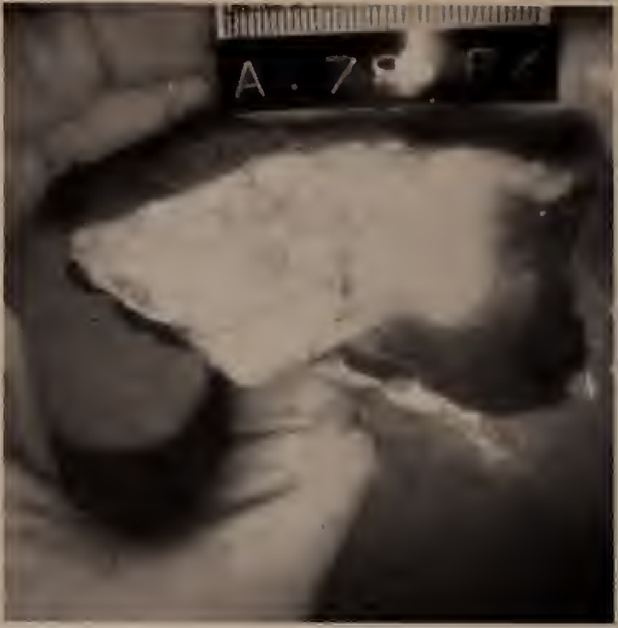

FIGURE 3. Cross-section of 9-cm tumor in left anteromedial thigh. Tumor is grayish-white and extremely hard. Femoral artery and vein pass through deep aspect of tumor mass.

Discussion

Despite the relatively common occurrence of benign calcification or ossification in degenerative, reactive, or neoplastic tissues or the somatic parts, extraosseous osteosarcoma is rarely encountered. Approximately 120 cases have been reported. This tumor was identified as a distinct entity by Fine and Stout in 1956.[1] The largest reported series of patients with this tumor contains only 26 patients.[2] This tumor comprises 1.2% to 4.6% of soft-tissue sarcomas and 2.6% to 4% of all osteosarcomas.[2–4]

Unlike skeletal osteosarcomas, which affects mainly the young, the mean age of patients with extraosseous osteosarcomas is 52.7 years.[4] The anatomic distribution of these tumors parallels that of skeletal osteosarcomas; 80% of the tumors occur in the extremities and limb girdles. The most common site of involvement is the thigh (39% of cases). Most patients have pain, swelling, or both at the site of the tumor. The median duration of symptoms prior to diagnosis is 3 to 6.5 months, but ranges from one week to 11 years.[2,4] Serum alkaline phosphatase is elevated in about one half of patients with osteosarcoma at presentation.

Rigid criteria must be met in diagnosing this tumor. The lack of attachment to bone or periosteum should be unequivocal. Production of malignant osteoid, bone, or both, and a frankly sarcomatous stroma must be seen histologically. Lesions to be excluded are myositis ossificans, malignant mesenchymoma, and teratoma.[1,2,4]

The aggressiveness of extraosseous osteosarcoma is shown by low cure and survival rates. Despite the fact that most patients have localized disease at the time of diagnosis, the average five-year survival rate is less than 15%, and 80% of patients are dead within two to three years.[4] A five-year survival is not necessarily a cure; patients have died of recurrent or metastatic disease 7, 9, and 14 years after diagnosis.[2] Metastatic disease is the usual cause of death, with metastases found in lungs (most common site), regional lymph nodes, bone, skin, brain, liver, pancreas, small bowel, heart, and aorta.[2,4–6]

The only treatment associated with long-term survival is adequate excision of the tumor.[1–5,7] Local excision results in recurrence rates from 42% to 100%, and this is usually followed by widespread metastases.[1,2,4–6] In the proved absence of metastatic disease, wide local excision with margins of 5 to 10 cm beyond the tumor is preferred.[3,4,7] The extremity should be salvaged if at all possible but, if not feasible, amputation is required.

Except for occasional temporary palliation, radiation therapy, either alone or in conjunction with local excision, has been of no proved benefit.[2,6] In one reported case, however, no residual tumor could be found in an amputated thigh after local excision and irradiation had preceded the amputation.[5]

Chemotherapy has not generally been helpful, but may be indicated for metastatic disease. No controlled trials have been performed because of the rarity of the tumor, and experience is anecdotal. Chemotherapeutic agents tried against this tumor over the years include colloidal lead, radioactive gallium, cyanocobalamin, glucosamine, acetylenic carbamate, dactinomycin, triethylene-melamine, dacarbazine, melphalan, actinomycin-D, nitrogen mustard, cyclophosphamide, 5-fluorouracil, methotrexate, triethylenethiophosphoramide, doxorubicin, and vincristine.[2,4–6] In one case, small-bowel obstruction due to this tumor was temporarily relieved with 5-fluorouracil.[8] Doxorubicin and vincristine were used in our patient (who refused surgical resection) in the hope that these agents would result in primary tumor shrinkage and make subsequent radiotherapy less formidable. This did not occur and in fact, metastatic pulmonary nodules appeared while chemotherapy was being given. Immunotherapy with C. Parvum, BCG, and irradiated tumor cells has been unsuccessful in the handful of patients so treated.[4]

Why do these tumors develop? Suspected predisposing or causative factors include trauma[1] (this has also been disputed[2,6]), extravasation of the angiographic contrast material Thorotrast[9] (a colloidal solution of radioactive thorium dioxide), intramuscular injection of penicillin,[10] and prior irradiation.[6,8] Of 50 patients discussed by Allan and Soule,[2] five developed their tumors in or near areas where histologically unrelated malignancies had been treated four to 14 years previously with radiation therapy. Our patient likewise had received radiation therapy for an earlier malignancy, but the two tumors appeared so close in time and so far removed in location, that any relationship between them seems unlikely. The ability of the totipotential fibroblast to differentiate into any mesodermal element under the proper stimulus may explain the development of these bone-forming tumors outside the skeleton.

Acknowledgments. The authors would like to recognize the patient's attending surgeon, Roger McMillan, M.D., and staff consultants, Otto Sahler, M.D., and Richard Horner, M.D., for their assistance with this case.

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Electrocardiograms of the Month

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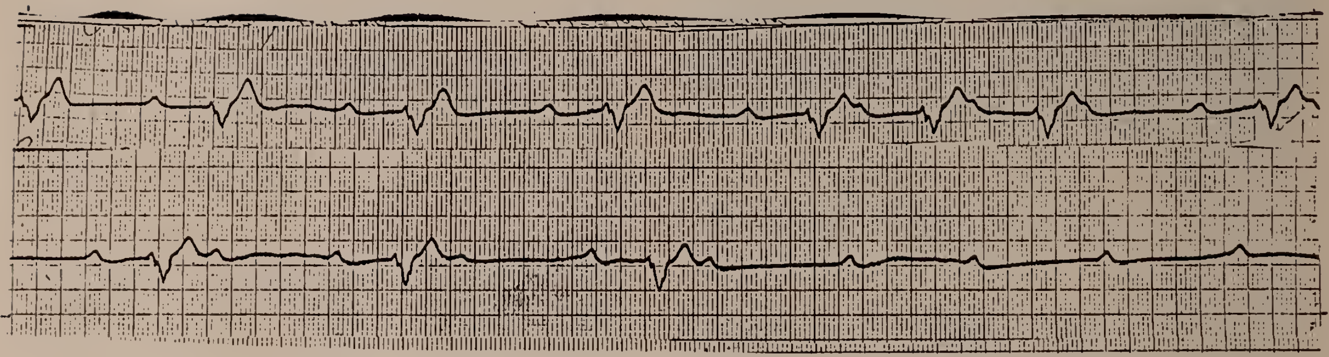
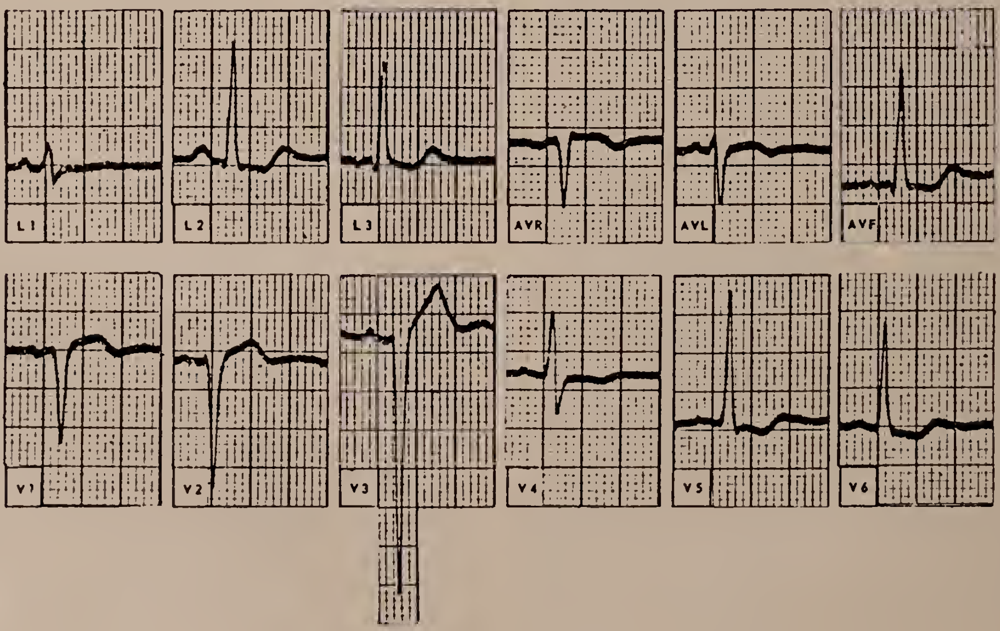


QUESTION 359. A 77-year-old woman came to the emergency room with severe chest pain. The electrocardiogram, lead II, was taken as the patient fainted. What is the interpretation of the electrocardiogram? What treatment was indicated?



QUESTION 360. The patient was a 72-year-old man with a history of angina and hypertension for many years. What is the interpretation of this electrocardiogram?

ELUCIDATION

Answer 359. Sinus arrhythmia is present at a rate of approximately 65/min. 2:1 heart block is present in the initial portion of the top strip. The second P wave is buried in the T wave giving the false impression of sinus bradycardia with 1° heart block. The PR interval of the conducted beats is 0.48 sec. Following the third QRS, 1:1 atrioventricular conduction is present.

In the bottom strip the sinus rate slows and all P waves are clearly visible. Following the third QRS all ventricular activity ceases. Complete heart block is present without an escape ventricular focus. Ventricular standstill is present.

Cardiopulmonary resuscitation was initiated immediately and a temporary pacemaker inserted. This patient made a complete recovery. There was clinical evidence of an acute myocardial infarction. Normal AV conduction returned with left bundle branch block.

In the bottom lead, the interval between P waves preceding and following the QRS is shorter than the PP interval between QRS complexes. This changing PP interval is called ventriculophasic sinus arrhythmia, which is at least theoretically due to increased vagal activity following a forceful carotid beat prolonging the following PP interval. When the QRS complexes disappear the PP interval regularizes. Theoretically, this results from loss of vagal activity following each carotid impulse.

Answer 360. The rhythm is regular sinus. The mean electrical axis of the QRS in the frontal plane is +75°; the mean electrical axis of the T wave is the same. The low T wave in I and negative T wave in aV_L are normal since the mean electrical axis of the T wave and QRS are approximately the same. In general, positive T waves are seen in leads with tall R waves; flat and negative T waves are present with biphasic or negative QRS complexes. This pattern is usually normal. The ST depressions in II, III, and AV_F are abnormal.

There is high voltage in the V leads. The T wave is biphasic in V_4 to V_6 with slight ST depression. There is a minute r wave in V_1 to V_3 but the T wave is positive in V_2 and V_3. The significance of the small r waves (failure of progression of R wave) is difficult to interpret in the presence of the positive T waves. Anteroseptal infarction may be present, but a definite diagnosis cannot be made.

This electrocardiogram is abnormal. It shows precordial lead high voltage, and nonspecific ST and T wave abnormalities of left ventricular hypertrophy.

Correction and amplification. Due to editorial revision of the April 1983 issue at the last moment EKGs #359 and #360 were inadvertently not removed from the Table of Contents of that issue.

Obituaries

Morris Boris Bender, M.D., of New York City died on January 23, 1983. Dr. Bender was 78 years old and a 1931 graduate of the University of Pennsylvania School of Medicine. He was a Fellow of the American College of Physicians and a Diplomate of the American Board of Psychiatry and Neurology. His memberships included the Academy of Medicine, the New York Neurological Society, the American Neurological Association, the American Academy of Neurology, the American Psychiatric Association, the Association for Research in Nervous and Mental Disease, the Society for Experimental Biology and Medicine, the New York County Medical Society and the Medical Society of the State of New York.

Louis Jack Berg, M.D., of Fort Lauderdale, Florida died on January 9, 1983 at the age of 85. Dr. Berg was a 1923 graduate of Columbia University College of Physicians and Surgeons and a member of the Westchester County Medical Society and the Medical Society of the State of New York.

Malcolm Albert Bouton, M.D., of Schenectady died on February 28, 1983 at the age of 76. He graduated in 1936 from the Medical College of Virginia and was a Fellow of the American College of Preventive Medicine and a Diplomate of the American Board of Preventive Medicine, Inc. Dr. Bouton was a member of the American Public Health Association, the Medical Society of the County of Schenectady, and the Medical Society of the State of New York.

Lester Breidenback, M.D., of New York City died on May 11, 1983 at the age of 85. He graduated in 1922 from New York University College of Medicine. He was a Fellow of the American College of Surgeons and a Diplomate of the American Board of Surgery. Dr. Breidenbach was a member of the Academy of Medicine, the New York State Surgical Society, the American Association for the Surgery of Trauma, the New York County Medical Society, and the Medical Society of the State of New York.

Sigmund S. Briger, M.D., of Brooklyn died on April 4, 1983. He was 81 years old and a 1925 graduate of New York University College of Medicine. He was a member of the Medical Society of the County of Kings and the Medical Society of the State of New York.

Donald Chapman Buckbee, M.D., of Dolgeville died on March 23, 1983. He was 49 years old and a 1962 graduate of Albany Medical College of Union University. He was a member of the Medical Society of the County of Herkimer, Inc. and the Medical Society of the State of New York.

Charles D. Bull, M.D., of New Rochelle died on March 23, 1983 at the age of 64. He was a 1945 graduate of Howard University College of Medicine. Dr. Bull was a member of the New York State Society of Internal Medicine, the American Geriatrics Society, the Medical Society of the County of Erie, and the Medical Society of the State of New York.

Marjorie M. Burtt, M.D., of Ithaca died on December 7, 1982. She was 92 years old and a 1922 graduate of the Columbia University College of Physicians and Surgeons. Dr. Burtt was a Diplomate of the American Board of Pediatrics and her memberships included the American Academy of Pediatrics, the Tompkins County Medical Society, and the Medical Society of the State of New York.

Robert E. Butler, M.D., of Rochester died on February 6, 1983. He was 64 years old. Dr. Butler was a 1944 graduate of Western Reserve University School of Medicine and a Diplomate of the American Board of Pediatrics. His memberships included the Academy of Medicine, the American Academy of Pediatrics, the Medical Society of the County of Monroe, Inc., and the Medical Society of the State of New York.

Nicholas Carabba, M.D., of Brooklyn died on April 8, 1983 at the age of 86. He graduated in 1921 from Fordham University School of Medicine and his memberships included the Medical Society of the County of Kings and the Medical Society of the State of New York.

Francis T. Carbone, M.D., of Berkley Heights, New Jersey died on April 27, 1977. He was 78 years old. Dr. Carbone graduated in 1925 from the University of Buffalo School of Medicine and was a member of the Medical Society of the County of Erie and the Medical Society of the State of New York.

A. William Di Brienza, M.D., of Brooklyn died on March 10, 1983. He was 67 years old. Dr. Di Brienza was a 1942 graduate of the Long Island College of Medicine (SUNY Downstate Medical Center). His memberships included the Academy of Psychosomatic Medicine, the Aerospace Medical Association, the American Geriatrics Society, the Pan American Medical Association, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

George James Digman, M.D., of Cambridge died on April 4, 1983 at the age of 67. He graduated in 1943 from the University of Buffalo School of Medicine. Dr. Digman was a Fellow of the American College of Angiology and the American College of Chest Physicians and a Diplomate of the American Board of Surgery. His memberships included the American Thoracic Society, the Medical Society of the County of Washington, and the Medical Society of the State of New York.

Rufus Lee Durfee, M.D., of Binghamton died on April 14, 1983. He was 89 years old. Dr. Durfee was a 1920 graduate of Cornell University Medical College and his memberships included the Academy of Medicine, the Medical Society of the County of Broome, and the Medical Society of the State of New York.

Donald L. Feinberg, M.D., of New York City died on December 23, 1982. He was 57 years old and a 1949 graduate of New York University College of Medicine. Dr. Feinberg was a Diplomate of the American Board of Pediatrics and his memberships included the Academy of Medicine, the American Academy of Pediatrics, the New York County Medical Society, and the Medical Society of the State of New York.

Robert H. Freund, M.D., of Brooklyn died on April 9, 1983 at the age of 67. He was graduated from Columbia University College of Physicians and Surgeons in 1940. Dr. Freund was a Fellow of the American College of Surgeons and a Diplomate of the American Board of Surgery. His memberships included the Academy of Medicine, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

Samuel Ganz, M.D., of West Hempstead died on April 2, 1983. He was 78 years old and a 1930 graduate of State University of New York Downstate Medical Center (Long Island College Hospital). Dr. Ganz was a member of the Nassau County Medical Society and the Medical Society of the State of New York.

William J. Gartland, M.D., of Jamaica died on March 10, 1983 at the age of 74. He graduated from the Long Island College of Medicine (SUNY Downstate Medical Center) in 1934 and was a member of the Medical Society of the County of Queens and the Medical Society of the State of New York.

Benjamin I. Gilson, M.D., of Pompano Beach, Florida died on March 21, 1983 at the age of 69. He was a 1938 graduate of the University of Buffalo School of Medicine. Dr. Gilson was a Fellow of the American College of Obstetricians and Gynecologists. He was also a Diplomate of the American Board of Obstetrics and Gynecology. His memberships included the American Fertility Society, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

Sanford Goodfriend, M.D., of White Plains died on April 3, 1983; he was 73 years old. Dr. Goodfriend graduated in 1936 from Rush Medical College. He was a Fellow of the American College of Gastroenterology and a Diplomate of the American Board of Internal Medicine. His memberships included the New York Academy of Gastroenterology, the New York County Medical Society, and the Medical Society of the State of New York.

Roland I. Grausman, M.D., of New York City died at the age of 86 on March 12, 1983. He was a 1921 graduate of Columbia University College of Physicians and Surgeons. Dr. Grausman was a Fellow of the American College of Surgeons and a Qualified Fellow of the International College of Surgeons. His memberships included the Academy of Medicine, the New York County Medical Society, and the Medical Society of the State of New York.

Isidore S. Greenberg, M.D., of Monticello died on March 12, 1983. He was 64 years old and a 1950 graduate of the Philadelphia College of Osteopedic Medicine and Surgery. He was a member of the Sullivan County Medical Society and the Medical Society of the State of New York.

Milton J. Greenberg, M.D., of Hudson Falls died on March 27, 1983 at the age of 69. He graduated in 1936 from the University of Vermont College of Medicine. Dr. Greenberg was a member of the Academy of Medicine, the Medical Society of the County of Washington, and the Medical Society of the State of New York.

Joseph Greenfield, M.D., of Hollywood, Florida died on April 21, 1982 at the age of 88. He was graduated in 1919 from Fordham Uuniversity School of Medicine. Dr. Greenfield was a Qualified Fellow of the International College of Surgeons and his memberships included the Academy of Medicine, the Westchester County Medical Society, and the Medical Society of the State of New York.

Joseph William Hewett, M.D., of Amherst died on April 3, 1983. He was 73 years old and a 1933 graduate of the University of Buffalo School of Medicine. His memberships included the Medical Society of the County of Erie and the Medical Society of the State of New York.

Herbert B. Johnson, M.D., of Boca Raton, Florida died on January 21, 1983 at the age of 74. He was a 1936 graduate of Cornell University Medical College, a member of the Medical Society of the County of Ulster, and the Medical Society of the State of New York.

Noah J. Kassman, M.D., of Ithaca died on May 1, 1983 at the age of 66. He graduated in 1942 from the State University of New York Downstate Medical Center (Long Island College of Medicine). Dr. Kassman was a Fellow of the American College of Obstetricians and Gynecologists and the American College of Surgeons; he was also a Diplomate of the American Board of Obstetrics and Gynecology. His memberships included the Tompkins County Medical Society and the Medical Society of the State of New York.

Mary J. Kazmierczak, M.D., of Buffalo died on May 4, 1983. She was 89 years old and a 1918 graduate of the University of Buffalo School of Medicine. Her memberships included the Academy of Medicine, the Medical Society of the County of Erie, and the Medical Society of the State of New York.

Michael Kenney, M.D., of Brooklyn died on April 29, 1982. He was 78 years old. Dr. Kenney graduated from the Faculte de Medecine de l'Universite de Geneve, Switzerland in 1930. He was a Fellow of the American College of Pathologists and a Diplomate of the American Board of Pathology. His memberships included the Academy of Medicine, the New York Society of Tropical Medicine, the American Public Health Association, the American Society of Clinical Pathologists, the Society of American Bacteriologists, the American Society of Tropical Medicine and Hygiene, the New York County Medical Society, and the Medical Society of the State of New York.

Joel William Kibler, M.D., of Tonawanda died on March 12, 1983. He was 82 years of age. Dr. Kibler was a 1927 graduate of the University of Buffalo School of Medicine. He was a Fellow of the American College of Allergists and his memberships included the Academy of Medicine, the

Medical Society of the County of Erie, and the Medical Society of the State of New York.

Nathan S. Kline, M.D., of Orangeburg died on February 11, 1983 at the age of 67. He was a 1943 graduate of New York University College of Medicine. Dr. Kline was a Fellow of the American College of Physicians and a Diplomate of the American Board of Psychiatry and Neurology. His memberships included the Academy of Medicine, the Association for Research in Nervous and Mental Disease, the American Psychiatric Association, the Society for Experimental Biology and Medicine, the American Public Health Association, the New York County Medical Society, and the Medical Society of the State of New York.

Ruth R. Knobloch, M.D., of Little Valley died on April 21, 1983. She was 75 years old and a 1933 graduate of the New York Medical College, Flower and Fifth Avenue Hospitals. Her memberships included the American Medical Women's Association, the Medical Society of the County of Cattaraugus, and the Medical Society of the State of New York.

Richard S. Kochman, M.D., of New York City died on April 20, 1983 at the age of 51. He was a 1958 graduate of the University of Louisville School of Medicine. Dr. Kochman was a Fellow of the American College of Surgeons and a Diplomate of the American Board of Ophthalmology. His memberships included the American Academy of Compensation Medicine, Inc., the American Academy of Ophthalmology and Otolaryngology, the New York County Medical Society, and the Medical Society of the State of New York.

G. Emerson Learn, M.D., of Mount Morris died on March 2, 1983. He was 74 years old. Dr. Learn was a 1935 graduate of the University of Buffalo School of Medicine and a member of the American Thoracic Society, the Medical Society of the County of Livingston, Inc., and the Medical Society of the State of New York.

Max Lehman, M.D., of Yonkers died on March 27, 1983. He was 88 years old and a 1920 graduate of New York University College of Medicine. His memberships included the Bronx County Medical Society and the Medical Society of the State of New York.

Frank G. Leone, M.D., of Utica died on April 29, 1983. He was 74 years of age and a 1932 graduate of the University of Buffalo School of Medicine. His memberships included the Academy of Medicine, the Medical Society of the County of Oneida, and the Medical Society of the State of New York.

David Robert Levine, M.D., of Brooklyn died on March 29, 1983. He was 76 years old and a 1931 graduate of the University of Maryland School of Medicine. Dr. Levine was a Diplomate of the American Board of Family Practice, and his memberships included the Medical Society of the County of Kings and the Medical Society of the State of New York.

Antonio Jose De Liz, M.D., of Aberdeen, Ohio died on February 11, 1983 at the age of 78. He was a 1933 graduate of the Faculdade de Medicina de la Universidade de Lisboa, Portugal and a member of the American Psychiatric Association, the Nassau County Medical Society, and the Medical Society of the State of New York.

Robert A. Mandelbaum, M.D., of Brooklyn died on February 11, 1983 at the age of 61. He was a 1945 graduate of New York University College of Medicine. Dr. Mandelbaum was a Fellow of the American College of Cardiology and the American College of Physicians. He was also a Diplomate of the American Board of Internal Medicine. His memberships included the New York State Society of Internal Medicine, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

David Marcus, M.D., of Floral Park, died on March 12, 1983. He was 71 years of age and had graduated in 1938 from the New York Medical College, Flower and Fifth Avenue Hospitals. Dr. Marcus was a Fellow of the American College of Obstetricians and Gynecologists and a Diplomate of the American Board of Obstetrics and Gynecology. He was a member of the Medical Society of the County of Queens and the Medical Society of the State of New York.

Vincent E. Maroney, M.D., of Brooklyn died on February 15, 1983 at the age of 72. He was a 1935 graduate of the Long Island College of Medicine (SUNY Downstate Medical Center). Dr. Maroney was a member of the American Academy of Family Practice, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

Thomas A. McCullough, M.D., of Ballston Spa died on January 26, 1983. He was 76 years old. Dr. McCullough was a 1941 graduate of the Middlesex University School of Medicine and his memberships included the Medical Society of the County of Albany and the Medical Society of the State of New York.

William W. Meissner, M.D., of Buffalo died on March 16, 1983 at the age of 79. He graduated from the University of Buffalo School of Medicine in 1927. Dr. Meissner was a Qualified Fellow of the International College of Surgeons and his memberships included the Academy of Medicine, the Medical Society of the County of Erie, and the Medical Society of the State of New York.

David Merksamer, M.D., of New York City died on April 10, 1983. He was 82 years old and a 1928 graduate of the University of Maryland School of Medicine. Dr. Merksamer was a Diplomate of the American Board of Pediatrics and the American Board of Anesthesiology. His memberships included the American Academy of Allergy, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

Frederick M. Miller, M.D., of Utica died on April 4, 1983. He was 88 years old and a 1921 graduate of Harvard Medical School. Dr. Miller was a Fellow of the American College of Surgeons and the American College of Obstetricians and Gynecologists. His memberships included the Academy of Medicine, the Medical Society of the County of Oneida, and the Medical Society of the State of New York.

Michael Morris Miller, M.D., of New York City died on November 30, 1982. He was 50 years old and a 1960 graduate of the Faculte de Medecine de l'Universite de Geneve, Switzerland. Dr. Miller was a Diplomate of the American Board of Ophthalmology, and a member of the American Academy of Ophthalmology and Otolaryngology, the New York County Medical Society, and the Medical Society of the State of New York.

Stuart J. Miller, M.D., of Elmira died on October 5, 1982. He was 61 years old and a 1945 graduate of the University of Buffalo School of Medicine. Dr. Miller was a member of the New York State Society of Internal Medicine, the Medical Society of the County of Chemung, and the Medical Society of the State of New York.

Irving Nachamie, M.D., of Brooklyn, died on May 8, 1983 at the age of 81. He graduated in 1926 from Columbia University College of Physicians and Surgeons. Dr. Nachamie was a Fellow of the American College of Obstetricians and Gynecologists and the American College of Surgeons. He was also a Diplomate of the American Board of Obstetrics and Gynecology. His memberships included the New York State Surgical Society, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

John O'Flanagan, M.D., of Long Island City died on March 31, 1983. He was 84 years old and a 1922 graduate of the National University of Eire, Ireland. His memberships included the New York County Medical Society and the Medical Society of the State of New York.

Richard L. O'Neill, M.D., of Binghamton died on May 8, 1983. He was 60 years old. He was a 1947 graduate of the Boston University School of Medicine and a Diplomate of the American Board of Orthopaedic Surgery. Dr. O'Neil was a member of the American Academy of Orthopaedic Surgeons, the Medical Society of the County of Broome, and the Medical Society of the State of New York.

Milton B. Philips, M.D., of Mt. Vernon died on May 14, 1983 at the age of 76. He graduated in 1932 from Columbia University College of Physicians and Surgeons. Dr. Philips was a member of the Academy of Medicine, the Westchester County Medical Society, and the Medical Society of the State of New York.

Keith Burdick Preston, M.D., of Utica died on March 11, 1983. He was 77 years old. Dr. Preston was a Fellow of the American College of Surgeons and of the American College of Obstetricians and Gynecologists. His memberships included the Academy of Medicine, the American Society of Clinical Hypnosis, the Medical Society of the County of Oneida, and the Medical Society of the State of New York.

Eugene H. Radzimski, M.D., of Buffalo died on March 6, 1983 at the age of 65. He graduated from the University of Buffalo School of Medicine in 1941. Dr. Radzimski was a Diplomate of the American Board of Ophthalmology and a member of the Medical Society of the County of Erie and the Medical Society of the State of New York.

Mark Berger Ravin, M.D., of New York City died on December 16, 1982. He was 47 years old. Dr. Ravin graduated from New York University College of Medicine in 1959 and was a Fellow of the American College of Anesthesiologists as well as a Diplomate of the American Board of Anesthesiology. His memberships included the New York State Society of Anesthesiologists, the American Society of Anesthesiologists, Inc., the New York County Medical Society, and the Medical Society of the State of New York.

J. Gustave Rosenblatt, M.D., of New York City died on January 15, 1983 at the age of 57. Dr. Rosenblatt graduated from the College of Osteopathic Medicine and Surgery, Des Moines, Iowa in 1956. He as a member of the Pan American Medical Association, the New York County Medical Society, and the Medical Society of the State of New York.

Milton Rothman, M.D., of New York City died on February 8, 1983 at the age of 70. He graduated from New York University College of Medicine in 1937. His memberships included the New York County Medical Society and the Medical Society of the State of New York. Dr. Rothman was a Fellow of the American College of Surgeons, a Qualified Fellow of the International College of Surgeons, and a Diplomate of the American Board of Surgery.

Jacob M. Rubin, M.D., of the Bronx died on October 21, 1982 at the age of 76. He was a graduate of the Universite de Paris Faculte de Medecine. His memberships included the American Academy of Family Practice, the Bronx County Medical Society, and the Medical Society of the State of New York.

Carl Joseph Sachs, M.D., of Plainfield, New Jersey died on February 7, 1983. He was 84 years old and a 1924 graduate of the Schlesische-Friedrich-Wilhelms-Universitat Medizinische Fakultat, Breslau, Prussia. Dr. Sachs was a member of the Medical Society of the County of Kings and the Medical Society of the State of New York.

Alvin A. Schaye, M.D., of New York City died on February 25, 1983 at the age of 79. Dr. Schaye was a 1928 graduate of the Yale University School of Medicine. He was a member of the Academy of Medicine, American Academy of Compensation Medicine, Inc., a Fellow of the American College of Physicians, and a Diplomate of the American Board of the American Board of Internal Medicine. He was a member of the New York County Medical Society and the Medical Society of the State of New York.

Louis Scheib, M.D., of North Miami, Florida died on February 19, 1983 at the age of 87. He graduated in 1921 from the State University of New York Downstate Medical Center (Long Island College Hospital) and was a member of the New York County Medical Society and the Medical Society of the State of New York.

Maxwell C. Scherzer, M.D., of Forest Hills died on July 28, 1982 at the age of 72. He graduated from New York University College of Medicine in 1935. Dr. Scherzer was a member of the American Geriatrics Society, the Medical Society of the County of Queens, and the Medical Society of the State of New York.

Richard Selznick, M.D., of the Bronx died on March 2, 1983 at the age of 50. He was a 1958 graduate of the State University of New York Downstate Medical Center. Dr. Selznick was a Fellow of the American College of Surgeons and a Diplomate of the American Board of Orthopedic Surgery. His memberships included the New York State Surgical Society, the American Academy of Orthopaedic Surgeons, the Bronx County Medical Society, and the Medical Society of the State of New York.

Lester Shapiro, M.D., of New York City died on April 4, 1983. He was 71 years old and a 1937 graduate of the University of Louisville School of Medicine. He was a member of the New York County Medical Society and the Medical Society of the State of New York.

John H. Shelley, M.D., of Howard Beach died on April 2, 1983 at the age of 65. He was a 1944 graduate of New York University College of Medicine. Dr. Shelley was a Diplomate of the American Board of Pediatrics and his memberships included the American Academy of Pediatrics, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

Neil Sherman, M.D., of New York City died on March 29, 1983. He was 53 years old and a 1956 graduate of New York University College of Medicine. Dr. Sherman was a Fellow of the American College of Obstetricians and Gynecologists and a Diplomate of the American Board of Obstetrics and Gynecology. He was a member of the New York County Medical Society and the Medical Society of the State of New York.

Charles M. Single, M.D., of Wolcott died on April 26, 1983 at the age of 72. He was a 1937 graduate of Albany Medical College of Union University. His memberships included the American Academy of Family Practice, the Medical Society of the County of Wayne, and the Medical Society of the State of New York.

Israel Steinberg, M.D., of Phoenix, Arizona died on February 15, 1983. He was 81 years old. He graduated in 1928 from Harvard Medical School and was a member of the New York County Medical Society as well as the Medical Society of the State of New York.

Charles Leonard Steyaart, M.D., of Sanibel, Florida died on February 11, 1983. He was 81 years old. Dr. Steyaart was a 1928 graduate of Johns Hopkins University School of Medicine. His memberships included the Medical Society of the County of Wayne and the Medical Society of the State of New York.

Murray Stolzer, M.D., of Nyack died on February 1983. He was 73 years old and graduated from the Faculte de Medecine de l'Universite de Lausanne, Switzerland in 1936. He was a member of the Rockland County Medical Society and the Medical Society of the State of New York.

G. Joseph Strully, M.D., of San Diego, California died on October 20, 1982. He was 76 years old and had graduated in 1934 from Georgetown University School of Medicine. Dr. Strully was a member of the American Academy of Family Practice, the American Geriatrics Society, the Suffolk County Medical Society, and the Medical Society of the State of New York.

Eugene M. Sullivan, M.D., of Lackawanna died on March 15, 1983. He was 80 years old. Dr. Sullivan graduated from the University of Buffalo School of Medicine in 1926 and was a Fellow of the American College of Surgeons. His memberships included the Academy of Medicine, the Medical Society of the County of Erie, and the Medical Society of the State of New York.

Leonard Sussman, M.D., of White Plains died on March 1, 1983. He was 47 years old and a 1960 graduate of the Albert Einstein College of Medicine of Yeshiva University. Dr. Sussman was a Diplomate of the American Board of Pediatrics and his memberships included the New York Pediatric Society, the Clinical Society of the New York Diabetes Association, the American Academy of Pediatrics, the Endocrine Society, the Westchester County Medical Society, and the Medical Society of the State of New York.

Alexander I. Thomashow, M.D., of Brooklyn died on May 17, 1983 at the age of 68. He graduated in 1939 from the State University of New York Downstate Medical Center (Long Island College of Medicine). Dr. Thomashow was a Fellow of the American College of Cardiology and the American College of Physicians, as well as a Diplomate of the American Board of Internal Medicine. His memberships included the Clinical Society of the New York Diabetes Association, the New York State Society of Internal Medicine, the Medical Society of the County of Kings, and Medical Society of the State of New York.

Frederick R. Thompson, M.D., of New York City died on April 12, 1983. He was 75 years old and a 1931 graduate of the University of Texas Medical Branch, Galveston. Dr. Thompson was a Fellow of the American College of Surgeons and a Diplomate of the American Board of Orthopedic Surgery. His memberships included the Academy of Medicine, the American Orthopaedic Association, the American Academy of Orthopaedic Surgeons, the American Association for the Surgery of Trauma, the New York County Medical Society, and the Medical Society of the State of New York.

Oscar A. Ulrich, M.D., of New York City died on February 27, 1983. He was 91 years old. In 1919 Dr. Ulrich graduated from the Medizinische Fakultat der Ludwig Maximilians Universitat, Munchen, Bavaria. He was a member of the Medical Society of the County of Schenectady and the Medical Society of the State of New York.

Allan H. Warner, M.D., of New York City died on March 4, 1983. He was 75 years old and a 1933 graduate of the New York University College of Medicine. Dr. Warner was a Fellow of the American College of Physicians and the American College of Chest Physicians. He was also a Diplomate of the American Board of Internal Medicine. His memberships included the Medical Society of the County of Queens and the Medical Society of the State of New York.

Benjamin B. Wetchler, M.D., of Boca Raton, Florida died on May 19, 1983 at the age of 78. He graduated in 1928 from New York University College of Medicine. Dr. Wetchler was a member of the New York County Medical Society and the Medical Society of the State of New York.

Marjorie A. Wheatley, M.D., of Woods Hole, Maine died on April 4, 1983 at the age of 86. She was a 1928 graduate of Columbia University College of Physicians and Surgeons. Dr. Wheatley was a member of the New York County Medical Society and the Medical Society of the State of New York.

Joseph A. Winn, M.D., of New York City died on February 9, 1983 at the age of 82. He was a 1924 graduate of the Universita Karlova Fakulta Lekarska, Prague. Dr. Winn was a member of the American Psychiatric Association, the New York County Medical Society, and the Medical Society of the State of New York. He was a Fellow of the American College of Physicians and a Diplomate of the American Board of Psychiatry and Neurology.

Asta J. Wittner, M.D., of Hollywood, Florida, died on May 12, 1983. He was 81 years old and graduated from the State University of New York Downstate Medical Center (Long Island College Hospital) in 1926. Dr. Wittner was a Diplomate of the American Board of Obstetrics and Gynecology and his memberships included the Academy of Medicine, the American Medical Women's Association, the American Fertility Society, the New York County Medical Society, and the Medical Society of the State of New York.

Hermann Wolff, M.D., of East Hampton died on January 23, 1983 at the age of 72. He was a 1935 graduate of the University of Virginia School of Medicine. Dr. Wolff was a Fellow of the American College of Surgeons and a Diplomate of the American Board of Surgery. His memberships included the Medical Society of the County of Queens and the Medical Society of the State of New York.

Martin R. Wolfsen, M.D., of New York City died on August 12, 1982. He was 92 years old. Dr. Wolfsen graduated in 1926 from the Universitat Heidelberg Medizinische Fakultat, Baden. He was a member of the New York County Medical Society and the Medical Society of the State of New York.

Philip A. Zoller, M.D., of Brooklyn died on February 14, 1983 at the age of 74. He was a 1937 graduate of the New York Medical College, Flower and Fifth Avenue Hospitals, and his memberships included the Academy of Medicine, the Medical Society of the County of Queens, and the Medical Society of the State of New York. Dr. Zoller was a Fellow of the American College of Surgeons and a Diplomate of the American Board of Surgery.

Correction. **Rubin Wassermann, M.D.,** of New York City, died on November 8, 1982.

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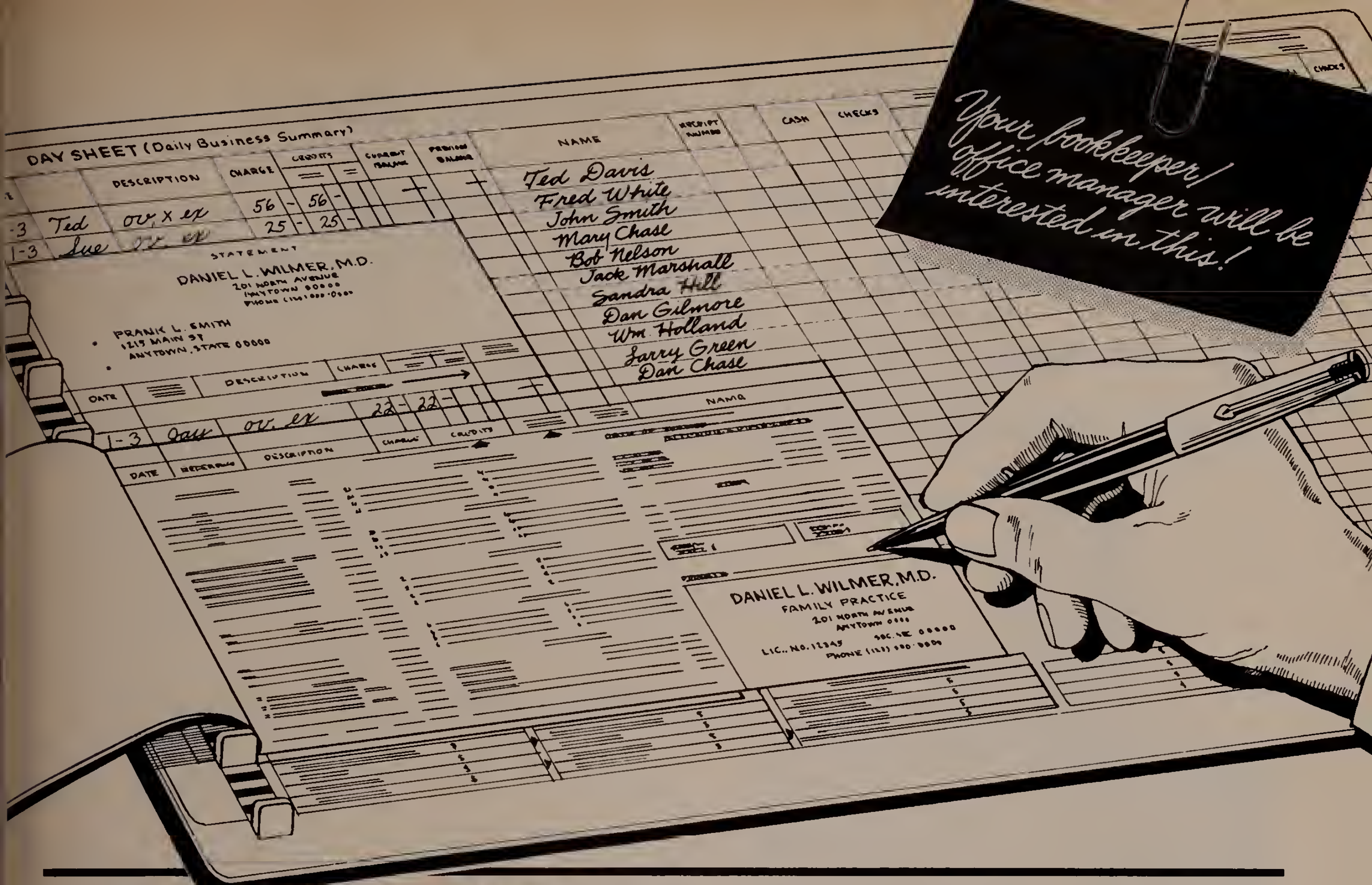
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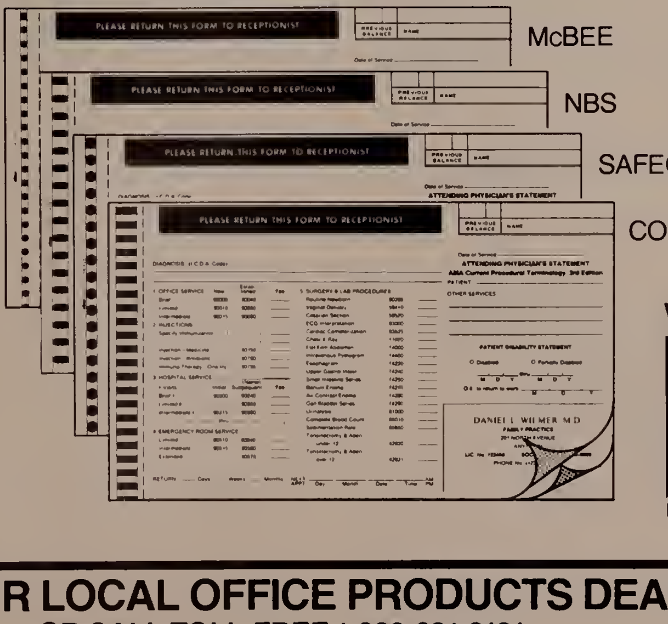
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1. Dixon RE: *Ann Intern Med* 89(Part 2):749-753, Nov 1978. *2.* Shils ME, Randall HT: Diet and nutrition in the care of the surgical patient, chap. 36, in *Modern Nutrition in Health and Disease*, edited by Goodhart RS, Shils ME; Philadelphia, Lea & Febiger, 1980, p. 1114.

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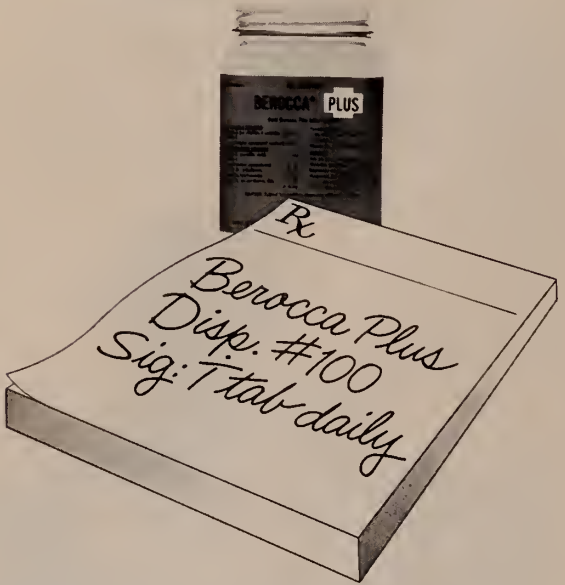

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Effective with this issue, classified advertising will appear in the front and back of the Journal. Beginning with the July issue, the classified ads will be set in a new typeface, and the section will be expanded. As the Physician Placement section is being discontinued, these listings will be incorporated into the classified ad section and will be charged at the regular classified rates. As of January 1984, classified ads will appear in a 3 column format, and there will be an increase in rates.

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what goes on IN CONTINUING MEDICAL EDUCATION

NEW YORK STATE **JULY 1983**

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Please send information to the Editor, WHAT GOES ON,
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Compiled by the Division of Scientific Activities
George J. Lawrence, Jr., M.D., Director
Mrs. Tina Koty, Editor
Philip Keating, Director, Division of Finance

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NEW YORK

M.E.D. Communications

655 Florida Grove Road
Hopelawn, NJ 08861
* Flower Hospital, 1249 Fifth Ave., NYC
July 20, 1983
CARDIOVASCULAR DISEASE: RISK-REDUCTION STRATEGIES
Drs. J. Stamler, M. Moser & H. M. Perry, Jr.
CREDIT: AMA Cat. 1 (6 Hrs.)
For further information contact Dr. Rosa Epel, Asst. Medical Director & Chairman of CME. Tel: 212/860-7820.

The National Academy of Clinical Biochemistry

* Holiday Inn-Coliseum
440 W. 57th St., NYC
July 22 & 23, 1983
THE CLINICAL BIOCHEMISTRY OF LIPIDS
For further information contact Otto E. Lobstein, Ph.D., Secretary, 2920 Priscilla Ave., Highland Park, Illinois 60035.

OUT OF STATE

Hospital of the University of Pennsylvania The Dept. of Radiology

3400 Spruce Street, Philadelphia, PA 19104
* Martha's Vineyard, MA
July 12–15, 1983
FIFTH ANNUAL DIAGNOSTIC IMAGING SEMINAR: AN ASSESSMENT OF CURRENT & FUTURE IMAGING PROCEDURES
Peter H. Arger, M.D.
FEE: $400. CREDIT: CME Cat. 1 (20 Hrs.)
For further information contact Ms. Janice Ford, Hospital of the Univ. of PA. Tel: 215/662-6904.

Symposia Medicus

2880 Shadelands Drive, Suite 404
Walnut Creek, CA 94598
* Tamarron, Colorado
July 9–16, 1983
DEVELOPMENTAL PEDIATRICS: NEW FRONTIERS
FEE: $295. CREDIT: AMA Cat. 1 (19 Hrs.)
For further information contact Symposia Medicus. Tel: 415/935-7889.

Music Associates of Aspen, Inc.

1860 Broadway, Suite 401
New York, NY 10023
* Aspen, Colorado
July 27–August 1, 1983
MEDICAL PROBLEMS OF MUSICIANS CONFERENCE TO TAKE PLACE AT THE ASPEN MUSIC FESTIVAL
Mr. Harold Schonberg
CREDIT: CME (20 Hrs.)
For further information contact the Aspen Music Festival. Tel: 212/581-2196.

The American Academy of Allergy & Immunology Sponsored by the Colorado Allergy Society

611 East Wells Street, Milwaukee, WI 53202
* Given Institute, Aspen, CO
July 28–30, 1983
1ST ANNUAL ASPEN ALLERGY CONFERENCE "DIAGNOSTICS TECHNIQUES IN ALLERGY"
For further information contact Dr. Henry Claman, University of Colorado Health Science Center, Box B-164, Denver CO 80262.

State University of New York at Buffalo Sponsored by The Dept. of Pediatrics, Children's Hospital of Buffalo and CME, Co-sponsored by The Hospital for Sick Children, Toronto, Canada

219 Bryant Street, Buffalo, NY 14222
* THE FOUR SEASONS HOTEL, TORONTO, CANADA
July 14–16, 1983
THE 6TH NATIONAL BUFFALO CONFERENCE ON PEDIATRIC/ADULT ALLERGY AND CLINICAL IMMUNOLOGY
Elliott Middleton, Jr., M.D. & Elliot F. Ellis, M.D.
FEE: $275. CREDIT: AMA Cat. 1 (20 Hrs.)
For further information contact Rayna Dutton, Children's Hospital of Buffalo. Tel: 716/878-7630/7640.

American Society of Clinical Pathologists

2100 West Harrison Street
Chicago, IL 60612
* Lake Tahoe (Crystal Bay), Nevada
July 25–29, 1983
NEW HORIZONS IN LABORATORY MEDICINE
For further information contact Barb Agustin, Amer. Society of Clinical Pathologists. Tel: 312/738-1336.

Medical Care Development

11 Parkwood Drive
Augusta, Maine 04330
* Bar Harbor, Maine
July 17–20, 1983
2ND BAR HARBOR MEDICAL SYMPOSIUM
CREDIT: AMA Cat. 1
For further information contact Gerald Goold or Joanne Adams, Medical Care Development, Inc. Tel: 207/622-7566.

Albert Einstein College of Medicine of Yeshiva University

1300 Morris Park Avenue
Bronx, NY 10461
* Massachusetts
July 4–8, 1983
PSYCHOPHARMACOLOGY: THE APPLICATION OF PSYCHOTROPHIC DRUGS
Dr. Herman Van Praag
July 11–15, 1983
DIVORCE: CLINICAL INTERVENTIONS
Dr. Mel Roman
INTOXICANT USE AND MISUSE
Dr. Norman Zinberg
July 18–22, 1983
THE INSANITY DEFENSE
Alan Dershowitz, J.D.
July 25–29, 1983
PSYCHIATRY AND THE STATE
Dr. Joel Kovel
APPROACHES TO FAMILY THERAPY
Dr. Israel Zwerling
FEE: $295.
For further information contact Office of Continuing Professional Education, Albert Einstein College of Medicine. Tel: 212/920-6676.

Harvard Medical School

Cambridge, Massachusetts
* Copley Plaza Hotel, Boston
July 29–31, 1983
GERIATRIC PSYCHIATRY
CREDIT: 21 hrs.

AROUND THE WORLD

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* STOCKHOLM, SWEDEN
July 4–8, 1983
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For further information contact Robert Ramblas, Stursberg/Hewitt/Radley. Tel: 213/462-6260.

International Conferences

189 Lodge Ave.
Huntington St, NY 11746
* PACIFIC WATERS
July 2–16, 1983
CME ALASKA CRUISE/CONFERENCE ON LEGAL MEDICAL ISSUES
* CARIBBEAN WATERS
July 27–August 6, 1983
CME CARIBBEAN CRUISE/CONFERENCE ON LEGAL MEDICAL ISSUES
For further information contact International Conferences, 189 Lodge Ave., Huntington St, NY 11746.

University of British Columbia

Vancouver, BC, Canada
* VANCOUVER, BC, CANADA
July 10–15, 1983
NEUOCHEMISTRY
For further information contact P. I. McGeer, M.D., PhD., Univ. of BC, Div. of Neurological Sciences, Faculty of Med., 2255 Westbrook Mall, Vancouver, BC, Canada, V6T1W5.

International Symposium on Adolescent Medicine

28 Achad Ha'am St., PO Box 394
Tel Aviv 61003, Israel
* JERUSALEM HILTON HOTEL, JERUSALEM
July 10–15, 1983
INTERNATIONAL SYMPOSIUM ON ADOLESCENT MEDICINE
For further information contact International Symposium on Adolescent Medicine, 28 Achad Ha'am St., PO Box 394, Tel Aviv 61003, Israel.

Congress Team International

PO Box 9, A-1095 Vienna, Austria
* VIENNA, AUSTRIA
July 11–16, 1983
WORLD CONGRESS OF PSYCHIATRY
For further information contact Congress Team International, PO Box 9, A-1095 Vienna, Austria.

University of Massachusetts, Amherst Sponsored by the New England Epidemiology Institute

July 31–August 20, 1983
EPIDEMIOLOGY SUMMER PROGRAM
CREDIT: 90 hrs.
For further information contact Nancy Dreyer, Ph.D. 617-734-9100

FUTURE EVENTS

Symposia Medicus

2880 Shadelands Drive, Suite 404
Walnut Creek, CA 94598
* GREEK ISLANDS CRUISE
August 21–September 5, 1983
CONTROVERSIES AND CONSENSUS IN OBSTETRICS
FEE: $295. CREDIT: AMA Cat. 1
For further information contact Symposia Medicus, 2880 Shadelands Drive, Suite 404, Walnut Creek, CA 94598. Tel: 415/935-7889.

Towsley Center for Continuing Medical Education Dept. of Postgraduate Medicine & Health Professions Education Towsley Center, University of Michigan

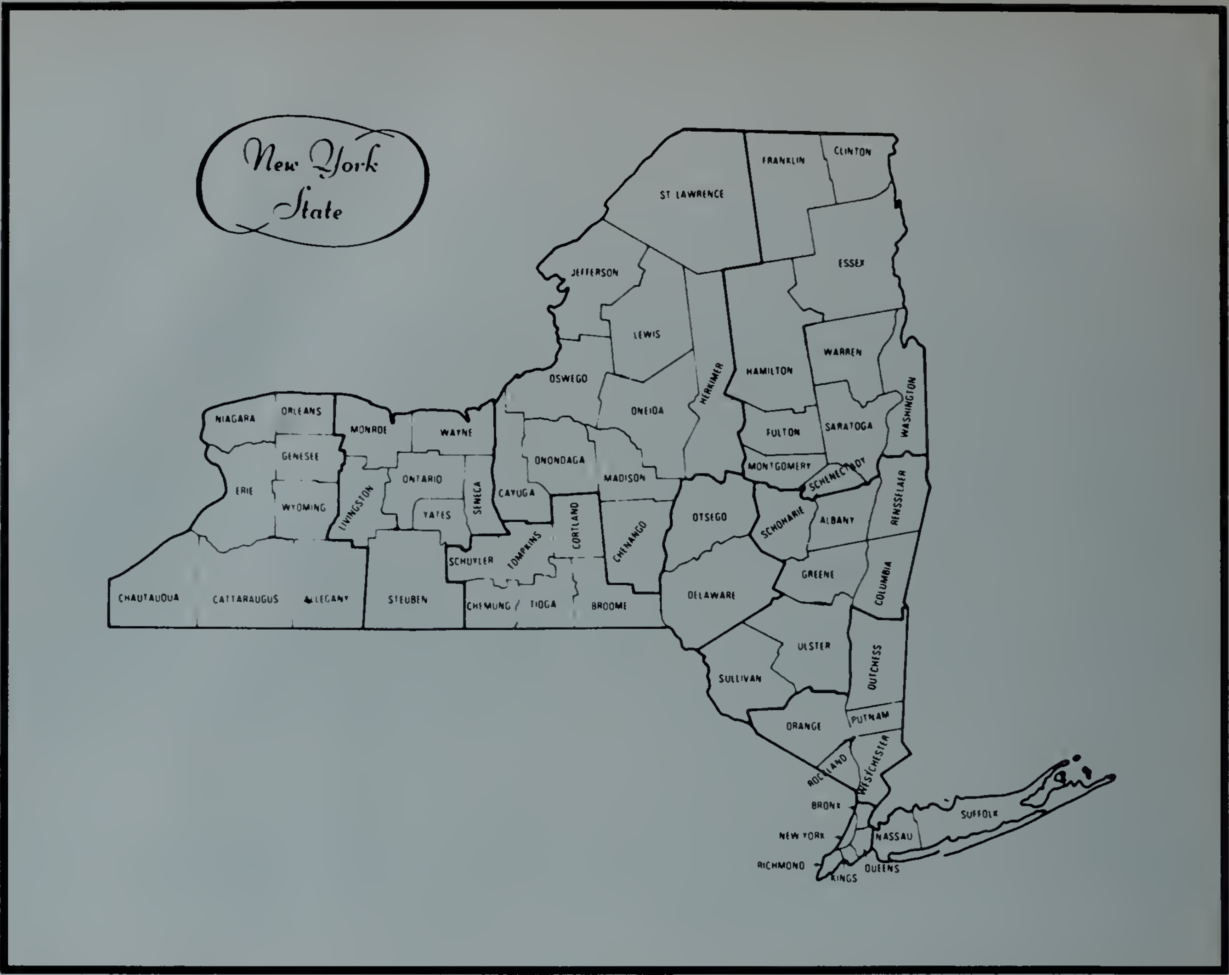
Ann Arbor, Michigan 48109
* The Homstead, Hot Springs, VA
August 3–6, 1983
DEVELOPING, MARKETING, AND MANAGING CONFERENCES: MAKING IT IN TOUGH TIMES
CREDIT: CME Cat. 1
For further information contact Towsley Center, Univ. of Michigan. Tel: 313/763-1400.

International Medical Education Corp.

* Dunfey's Resort, Cape Cod
August 5–7, 1983
CLINICAL MANAGEMENT OF CORONARY DISEASE AND DUAL-MODE EXERCISE TESTING
CREDIT: 13 hrs.
For further information contact Stephen Mattingly at (800) 525-8651

National Center on Child Abuse

* Baltimore Convention Center
September 25–28, 1983
SIXTH NATIONAL CONFERENCE ON CHILD ABUSE AND NEGLECT
For further information call (301) 366-8161



physicians' placement opportunities

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Division of Scientific Activities
George J. Lawrence, Jr., M.D., Director
Mrs. Tina Koty, Editor
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MONTICELLO, N.Y., contact Carl K. Heins, M.D., Hamilton Avenue Hospital, Monticello, 12701. Tel: 914/794-4545.

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WELLSVILLE, N.Y., contact Robert W. Harris, Admin., Jones Memorial Hospital, 191 North Main Street, Wellsville, N.Y., Tel: 716/593-1100.

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OLEAN, N.Y., contact Dr. Edward R. Mountain, 1909 West State St., Olean, 14760. Tel: 716/372-2788.

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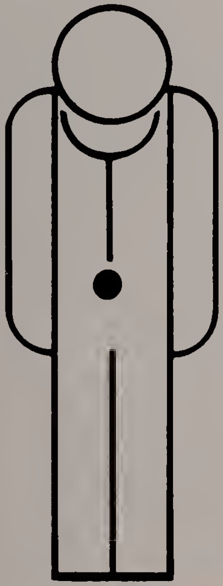

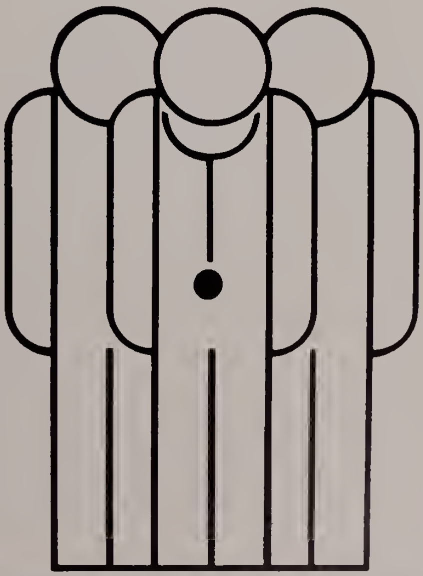

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POSTAGE. Second class postage is paid at New Hyde Park, New York and additional mailing office. POSTMASTER: Send POD Form 3579 to New York State Journal of Medicine, 420 Lakeville Road, Lake Success, New York 11042.

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Agent of change

Ativan®
(lorazepam) Ⓒ
for Anxiety

See important information on following page.

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NEW TABLET DESIGN 0.5, 1.0 and 2.0 mg

Brief Summary of Prescribing Information.

Indications and Usage: Management of anxiety disorders or short-term relief of symptoms of anxiety or anxiety associated with depressive symptoms. Anxiety or tension associated with stress of everyday life usually does not require treatment with an anxiolytic.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy shoold be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

Ativan® Ⓒ for (lorazepam) Anxiety

DOSAGE: Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; Insomnia due to anxiety or transient situational stress, 2-4mg h.s.

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References:

1. Stone PH, Turi ZG, Muller JE: Efficacy of nifedipine therapy for refractory angina pectoris. *Am Heart J* 104:672-681, September 1982.
2. Antman E, Muller J, Goldberg S, et al: Nifedipine therapy for coronary-artery spasm: Experience in 127 patients. *N Engl J Med* 302:1269-1273, June 5, 1980.

BRIEF SUMMARY
PROCARDIA® (nifedipine) **CAPSULES** For Oral Use

INDICATIONS AND USAGE: I. Vasospastic Angina: PROCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria: 1) classical pattern of angina at rest accompanied by ST segment elevation, 2) angina or coronary artery spasm provoked by ergonovine, or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography, the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PROCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e.g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm, or when angina is refractory to nitrates and/or adequate doses of beta blockers.

II. Chronic Stable Angina (Classical Effort-Associated Angina): PROCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or organic nitrates or who cannot tolerate those agents.

In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in those patients are incomplete.

Controlled studies in small numbers of patients suggest concomitant use of PROCARDIA and beta blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs. (See Warnings.)

CONTRAINDICATIONS: Known hypersensitivity reaction to PROCARDIA.

WARNINGS: Excessive Hypotension: Although in most patients, the hypotensive effect of PROCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension. These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers.

Severe hypotension and/or increased fluid volume requirements have been reported in patients receiving PROCARDIA together with a beta blocking agent who underwent coronary artery bypass surgery using high dose fentanyl anesthesia. The interaction with high dose fentanyl appears to be due to the combination of PROCARDIA and a beta blocker, but the possibility that it may occur with PROCARDIA alone, with low doses of fentanyl, in other surgical procedures, or with other narcotic analgesics cannot be ruled out. In PROCARDIA treated patients where surgery using high dose fentanyl anesthesia is contemplated, the physician should be aware of these potential problems and, if the patient's condition permits, sufficient time (at least 36 hours) should be allowed for PROCARDIA to be washed out of the body prior to surgery.

Increased Angina: Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PROCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Beta Blocker Withdrawal: Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines. Initiation of PROCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PROCARDIA initiation. It is important to taper beta blockers if possible, rather than stopping them abruptly before beginning PROCARDIA.

Congestive Heart Failure: Rarely, patients, usually receiving a beta blocker, have developed heart failure after beginning PROCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event.

PRECAUTIONS: General: Hypotension: Because PROCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PROCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. (See Warnings.)

Peripheral edema: Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PROCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy. With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Drug Interactions: Beta-adrenergic blocking agents: (See Indications and Warnings.) Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PROCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina.

Long-acting nitrates: PROCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Digitalis: Administration of PROCARDIA with digoxin increased digoxin levels in nine of twelve normal volunteers. The average increase was 45%. Another investigator found no increase in digoxin levels in thirteen patients with coronary artery disease. In an uncontrolled study of over two hundred patients with congestive heart failure during which digoxin blood levels were not measured, digitalis toxicity was not observed. Since there have been isolated reports of patients with elevated digoxin levels, it is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing PROCARDIA to avoid possible over- or under-digitalization.

Carcinogenesis, mutagenesis, impairment of fertility: When given to rats prior to mating, nifedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose.

Pregnancy: Category C. Please see full prescribing information with reference to teratogenicity in rats, embryotoxicity in rats, mice and rabbits, and abnormalities in monkeys.

ADVERSE REACTIONS: The most common adverse events include dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%. Syncopal episodes did not recur with reduction in the dose of PROCARDIA or concomitant antianginal medication. Additionally, the following have been reported: muscle cramps, nervousness, dyspnea, nasal and chest congestion, diarrhea, constipation, inflammation, joint stiffness, shakiness, sleep disturbances, blurred vision, difficulties in balance, dermatitis, pruritus, urticaria, fever, sweating, chills, and sexual difficulties. Very rarely, introduction of PROCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related. Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

Laboratory Tests: Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CPK, LDH, SGOT, and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nifedipine therapy. The relationship to PROCARDIA therapy is uncertain. These laboratory abnormalities have rarely been associated with clinical symptoms. Cholestasis, possibly due to PROCARDIA therapy, has been reported twice in the extensive world literature.

HOW SUPPLIED: Each orange, soft gelatin PROCARDIA CAPSULE contains 10 mg of nifedipine. PROCARDIA CAPSULES are supplied in bottles of 100 (NDC 0069-2600-66), 300 (NDC 0069-2600-72), and unit dose (10x10) (NDC 0069-2600-41). The capsules should be protected from light and moisture and stored at controlled room temperature 59° to 77°F (15° to 25°C) in the manufacturer's original container.

More detailed professional information available on request. © 1982, Pfizer Inc.

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"I can do things that I couldn't do for 3 yrs. including joining the human race again."

Quotes from an unsolicited letter received by Pfizer from an angina patient.
While this patient's experience is representative of many unsolicited comments received, not all patients will respond to Procardia nor will they all respond to the same degree.

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"My daily routine consisted of sitting in my chair trying to stay alive."

"My doctor switched me to PROCARDIA[*] *as soon as it became available. The change in my condition is remarkable."*

"I shop, cook and can plant flowers again."

"I have been able to do volunteer work...and feel needed and useful once again."

PROCARDIA can mean the return to a more normal life for your patients—having fewer anginal attacks,[1] taking fewer nitroglycerin tablets,[2] doing more, and being more productive once again.

Side effects are usually mild (most frequently reported are dizziness or lightheadedness, peripheral edema, nausea, weakness, headache and flushing, each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%).

for the varied faces of angina

PROCARDIA®
(NIFEDIPINE) *Capsules 10 mg*

* Procardia is indicated for the management of:
1) Confirmed vasospastic angina.
2) Angina where the clinical presentation suggests a possible vasospastic component.
3) Chronic stable angina without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or nitrates or who cannot tolerate these agents. In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks' duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in these patients are incomplete.

Please see PROCARDIA *brief summary on adjoining page.*

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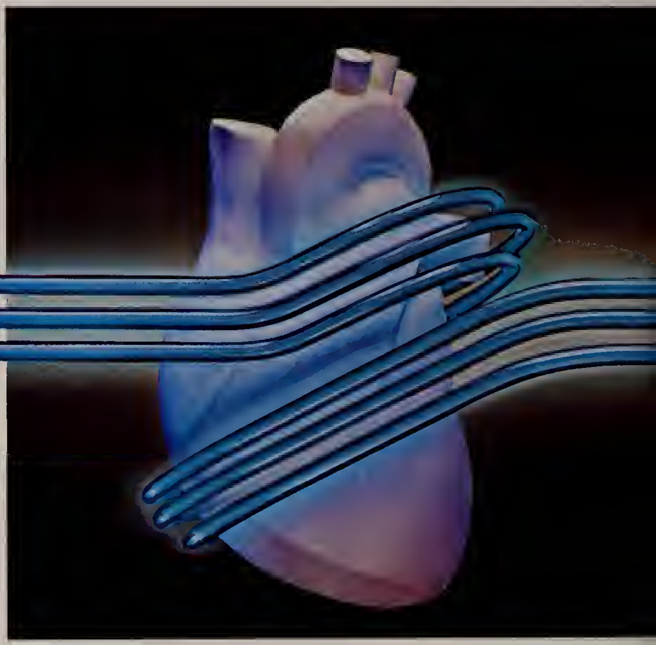

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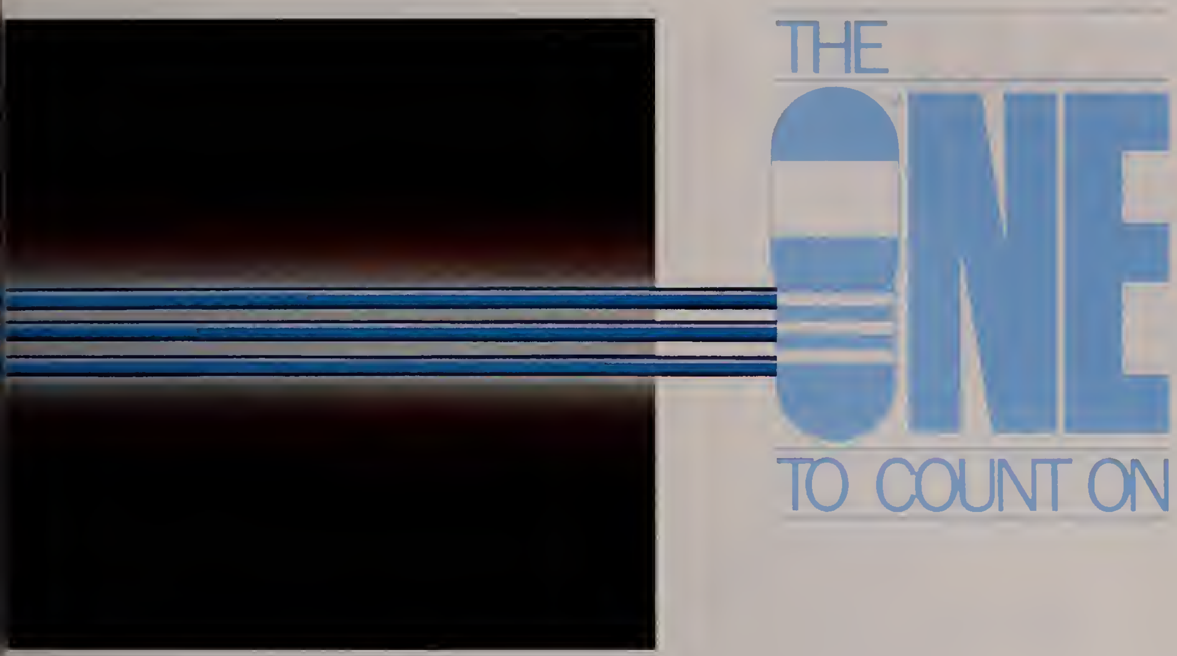

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80 mg 120 mg 160 mg

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Please see last page for Brief Summary of Prescribing Information.

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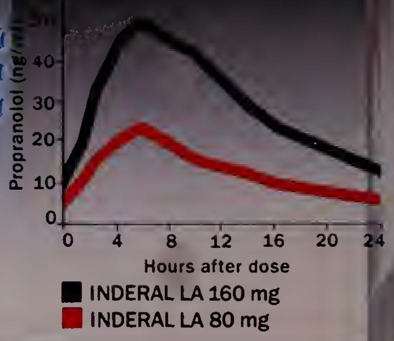

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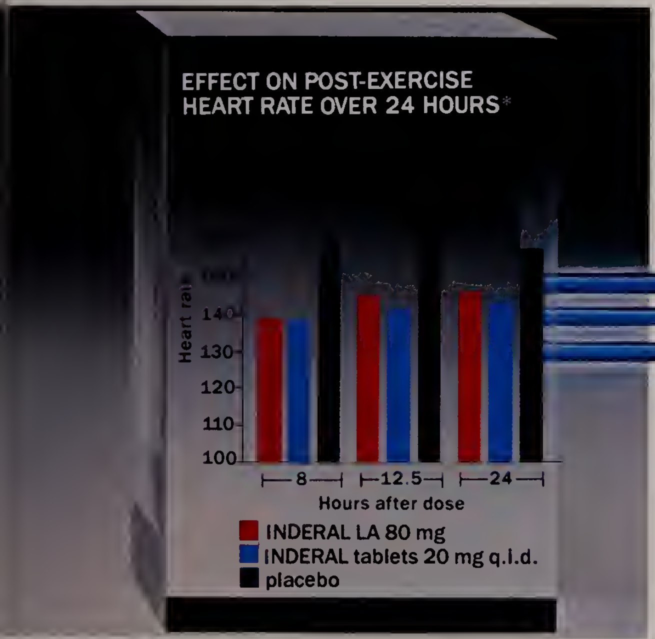

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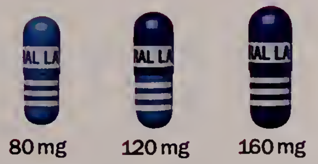

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*INDERAL LA vs. tablets: N.S. at all hours measured.

*INDERAL LA vs. placebo: $p < .05$ at all hours measured.

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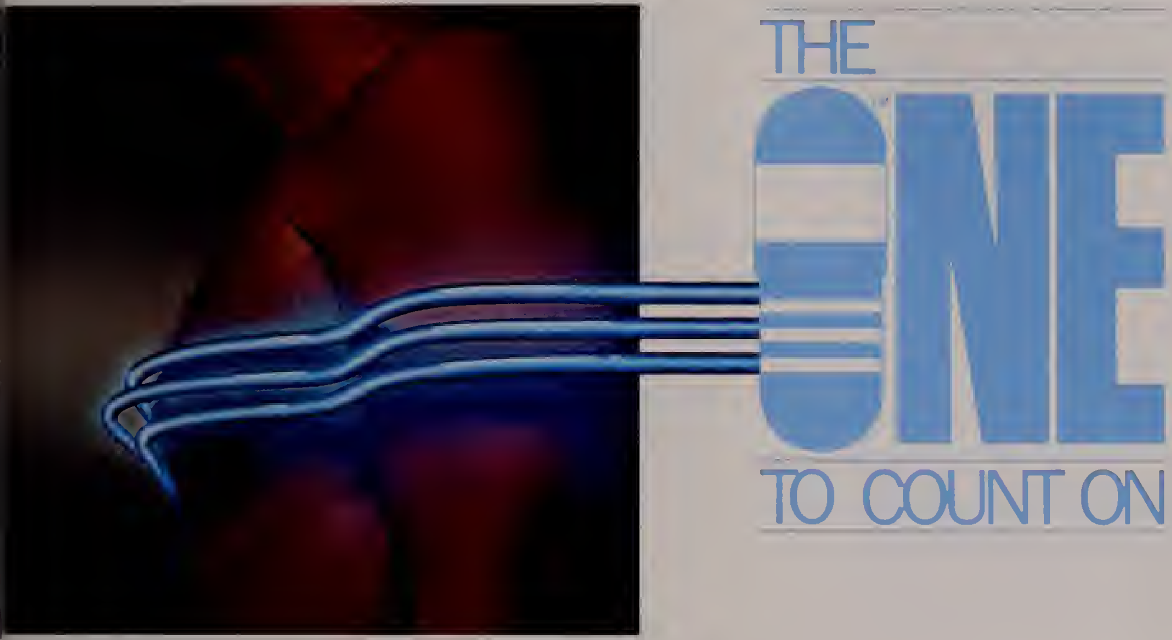
Start with 80 mg once daily

The usual initial dose is 80 mg INDERAL LA whether used alone or with a diuretic. Dosage may be increased to 120 mg or 160 mg once daily as needed to achieve additional control.

When converting patients from other beta blockers including INDERAL tablets, start with the nearest milligram equivalent of INDERAL LA once daily and evaluate clinical results to determine if dosage adjustment is necessary.

Unsurpassed convenience and simplicity

Enhanced patient compliance



AND ANGINA

Simplified core therapy begins with 80 mg once daily

Although individual patients may respond to various doses, the average optimal dose in angina pectoris is 160 mg once daily.

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Like conventional INDERAL tablets, INDERAL LA should not be used in the presence of congestive heart failure, sinus bradycardia, heart block greater than first degree, and bronchial asthma.

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INDERAL® LA

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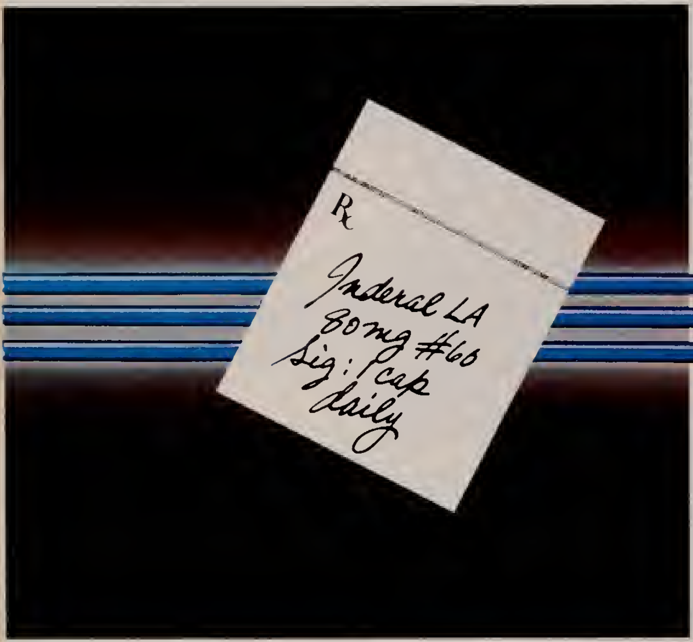
80 mg 120 mg 160 mg

The appearance of INDERAL LA capsules is a trademark of Ayerst Laboratories.

Please see last page for Brief Summary of Prescribing Information.



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ONCE-DAILY
INDERAL® LA
(PROPRANOLOL HCl) LONG ACTING CAPSULES

BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION. SEE PACKAGE CIRCULAR.)*
INDERAL® LA brand of propranolol hydrochloride
(80 mg, 120 mg, 160 mg Long Acting Capsules)

DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules.

CLINICAL PHARMACOLOGY. INDERAL is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period

The mechanism of the antihypertensive effect of INDERAL has not been established Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity

In dosages greater than required for beta-blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable

INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.

WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

> IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema) – PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors

MAJOR SURGERY. The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA. Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS. General: Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug

Pregnancy Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus

Nursing Mothers. INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular. bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands, thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System. Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol

DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION – *Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks

ANGINA PECTORIS – *Dosage must be individualized.* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE – *Dosage must be individualized.* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS – 80-160 mg INDERAL LA once daily

PEDIATRIC DOSAGE
At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

*The appearance of these capsules is a trademark of Ayerst Laboratories. **8511/783**

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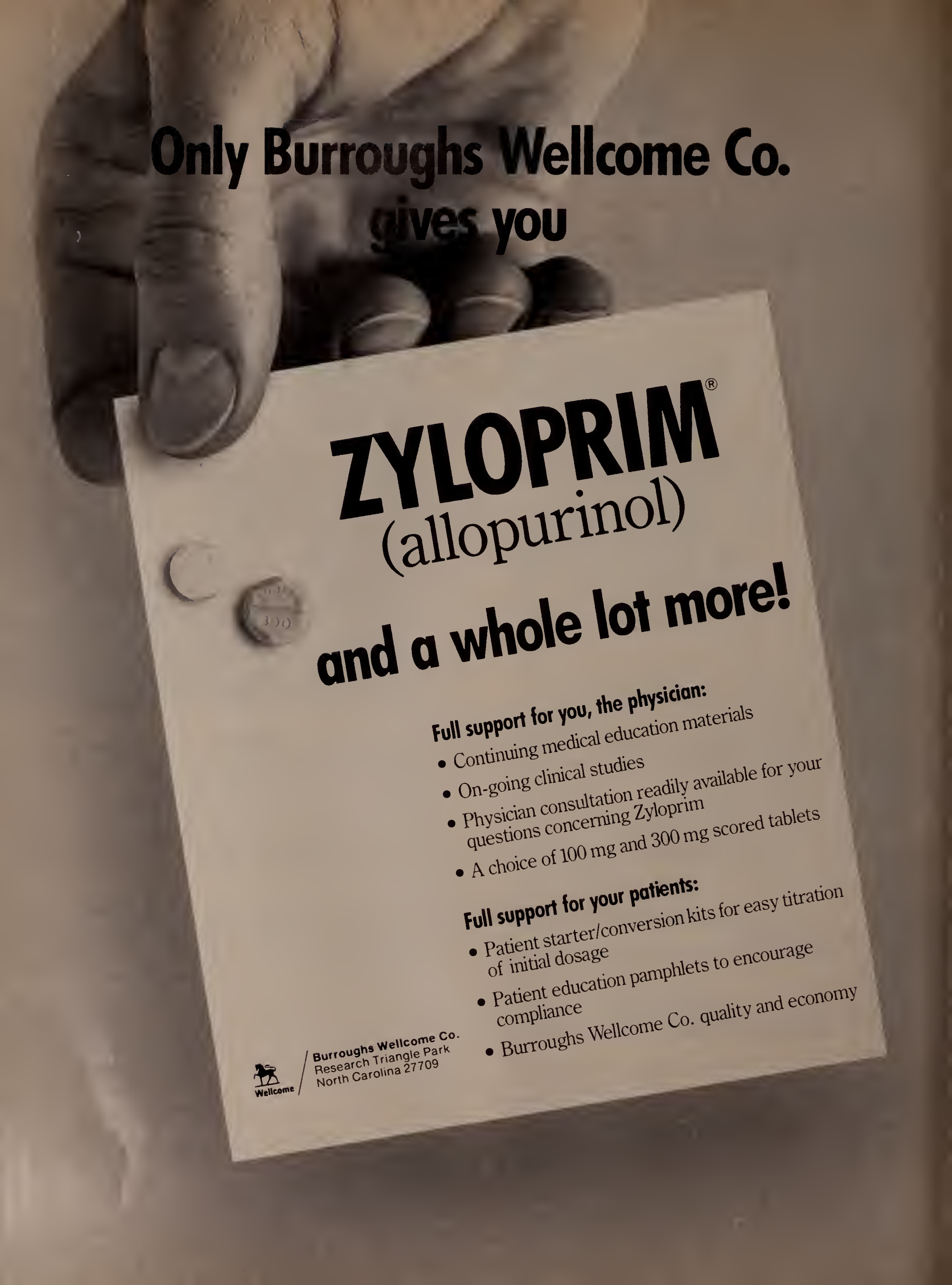

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NEW YORK STATE
JOURNAL OF MEDICINE

July, August, SEPTEMBER 1983 • Volume 83, Numbers 8, 9, 10

COMMENTARIES

A forward-looking journal

The *New York State Journal of Medicine*, published continuously since 1901, is one of the oldest independent medical journals in the United States—and a source of pride to the membership of the Medical Society of the State of New York. In 1983 the *Journal* has undergone major changes aimed at strengthening its position as an internationally respected scientific periodical.

In addition to its first full-time physician-editor, the *Journal* has welcomed a new Deputy Editor, Pascal James Imperato, MD. The editors have upgraded the peer review process for manuscripts and have greatly increased the number of referees from around the world. Approximately 20% of contributions to the *Journal* are now being accepted for publication after revision. Consulting Editor John T. Flynn, MD, who produced more than 60 clinicopathologic conferences (CPCs) for the *Journal* in the 1970s, is coordinating a new series of CPCs and symposia from medical centers throughout the Northeast. Joseph Feldman, DrPH, the *Journal*'s first Consultant in Biostatistics and Epidemiology, is reviewing original data and methods of Research Papers. A science and medicine correspondent, Marc Kusinitz, PhD, is inaugurating a news and feature section. New Guidelines for Authors have been written in accordance with the Uniform Requirements for the Submission of Manuscripts. The Requirements were established by the International Committee of Medical Journal Editors, of which the *Journal* is now a participating member.

A new format has been designed for more engaging reading. Advertising has been returned to the front and back of each issue, no longer interrupting the editorial content. Advertisements will be reviewed by physician referees, and final approval will continue to rest with the Editor. The classified advertising section has been expanded. "What goes on" is being replaced by a more comprehensive listing of State, national, and international meetings and lectures.

The transfer of the Boettiger Library of the Academy of Medicine of the County of Queens to the Society's Bernstein Library has given the *Journal* a major scientific library with full back volumes and current issues of the world's key medical journals.

During the time it has taken for the editors to build a reserve of manuscripts and implement other changes, it has been necessary to publish combined issues. The *Journal* resumes monthly publication with the December issue, the largest in its history. This year marks the end of a decade since the *Journal* went from semimonthly to monthly publication. (At one time, it was published weekly.) It is anticipated that the *Journal* will be able to resume semimonthly publication as early as mid-1984. In so doing, it is hoped that the *Journal* will regain timeliness in reporting and commenting on medical issues and will ensure prompt publication of accepted manuscripts and letters to the editor. Through wider distribution in the United States and abroad, it is hoped the *Journal* will receive greater support from the academic and research communities and from the medical profession as a whole.

Just as the Medical Society of the State of New York seeks to unite individuals engaged in the practice of medicine, so the *Journal* seeks to serve as an ecumenical voice for all physicians and students. It is important that students and housestaff know they are capable of contributing to their profession and their community. The editors cherish their role as teachers and enjoy working with authors at all stages of their medical career who undertake the challenge of communicating new information or considered opinions to their colleagues.

With 12 medical schools, New York State is one of the world's leading centers of medical education. The *Journal* provides a valuable link for these schools, as well as a means of widely reporting their achievements. As a general publication covering issues of interest to physicians in all specialties, the *Journal* offers one of the few common meeting grounds for the free and open discussion of governmental and commercial pressures on the profession. At a time when the role of medical societies is being directed to economic and political concerns, an independent peer-reviewed journal becomes even more important as a forum for presentation of original research, analysis of clinical trends, and debate on topical issues.

ALAN BLUM, MD
Editor

Tick-borne diseases

Patients with tularemia come to their physicians with varied clinical manifestations. The case described in this issue of the *Journal* (page 1053) illustrates the diagnostic difficulties physicians may have in making the correct diagnosis and in administering appropriate therapy. The small number of patients acquiring this infection in the United States each year (288 in 1981) leads to a lack of familiarity with the various manifestations of tularemia. Delays in diagnosis are understandable but we need to be reminded that these infections do exist, in circumstances similar to the clinical events presented, and include tularemia in our list of differential diagnoses. The diagnosis in this case was confirmed by serologic means. This test is sensitive and specific. It should be noted that Gram's stain of the pus obtained from the bubo failed to reveal some gram-negative rods typical of *Francisella tularensis.* This organism does not stain well in tissue sections or in pus, a fact noted by McCoy in 1910. The organism can be cultured from pus but there is a high risk of laboratory-acquired infections if adequate precautions are not taken when handling the cultures. Humans are infected by less than 50 organisms by either the aerosol or cutaneous routes. This boy could have avoided a surgical procedure and prolonged morbidity had early gentamicin or tetracycline therapy been initiated. Isolates of *F tularensis* have remained sensitive to tetracycline and aminoglycoside group of antibiotics as well as chloramphenicol. None of the newer penicillin or cephalosporin group of antibiotics has been shown to be effective against this organism.

There are three other infections that are transmitted by tick bites acquired in the State of New York and surrounding areas that need periodic review. Each infection can be controlled with chemotherapeutic agents. Thus, in addition to *F tularensis*, the following are possible infections:

Babesiasis. *Babesia microti*, a malaria-like protozoan, causes febrile disease (intermittent fever, hemolysis, and splenomegaly) especially in patients who are immunosuppressed or had a splenectomy. The disease is found on Nantucket Island, Long Island, and Wisconsin. Patients can be treated with quinine and clindamycin. Healthy adults usually have mild or asymptomatic infection.

Lyme disease. This is a presumed infection; a treponema-like spirochete has been isolated from ticks captured on Shelter Island, New York. Patients develop a skin eruption classic for this disease, ie, erythema chronicum migrans (ECM), and may also have arthritis, myopericarditis, or central nervous system lesions. Patients respond to penicillin and this antibiotic may prevent the development of arthritis. Both babesiasis and Lyme disease are transmitted by bites of hard-bodied ticks, *Ixodes dammini*, a tick that feeds on deer mice (and people).

Tick-borne typhus (Rocky Mountain spotted fever). Caused by *Rickettsia rickettsii*, this febrile disease with its petechiae and macular-papular rash continues to be confused with measles or other viral exanthems and even drug reactions. Unfortunate delays in antibiotic therapy often occur. The number of reported cases has increased each year for the past ten years (1,192 cases in 1981—double the number of 523 in 1972). Deaths during this time have ranged from 36 to 50. Appropriate treatment with tetracycline or chloramphenicol is curative.

The lesson to be learned from this case report is that infectious diseases can be spread by the bite of infected ticks. Some of these diseases seem to be increasing in incidence. This is probably due to enhanced opportunities to come in contact with ticks as humans spread into suburbia. While most tick bites are innocuous (about 1 in 1,000 to 2,000 ticks in an endemic area may be carrying the rickettsiae that cause tick-borne typhus), patients who report such bites should be advised to check their temperature regularly and to report any elevations to a physician.

Finally, physicians should advise their patients how to remove ticks from themselves or their children. Removal with fingers may result in tularemia or tick-borne typhus if the tick is infected. Always remove the tick with tweezers or paper to prevent the organisms from contacting the skin. The tick's hold on the skin should be lessened by applying a hot match or acetone (nail polish remover).

RICHARD B. HORNICK, MD
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The *Journal* welcomes and encourages letters to the editor. Letters should be succinct and precise. Preference for publication will be given to those not exceeding 450 words. Letters must be typewritten and double-spaced, with six or fewer references. The references should be based on the style used in *Index Medicus*. Letters should not duplicate manuscripts or correspondence submitted to other journals, newspapers, or magazines. The signature, academic degree, professional affiliation, and address of each author must be included. Every effort will be made to expedite the publication of accepted letters. All letters are personally acknowledged by the editor.

Address letters to Editor, New York State Journal of Medicine, 420 Lakeville Road, P.O. Box 5405, Lake Success, New York 11042.

Recurrence of bronchiolar carcinoma 19 years after resection

TO THE EDITOR: Bronchiolar carcinoma of the lung, also called alveolar cell carcinoma, is a variant of adenocarcinoma but has been known to be compatible with long survival rates after resection. We report an unusual case of a patient who lived 19 years after resection but then developed a recurrence at the site of the previous surgery.

Case report. A 77-year-old man was admitted to the hospital in February 1979 with complaints of chest pain and 5-lb weight loss. In 1960, at age 58, he had several episodes of hemoptysis. Chest x-ray at that time revealed a nodule in the left upper lobe, and he underwent a lobectomy and resection of the left fifth rib. The pathologic diagnosis was papillary adenocarcinoma of the lung without regional lymph node involvement. Periodic chest x-rays over the next several years demonstrated clear lung fields.

Examination now showed an increased anteroposterior diameter of the chest. A 3 × 5-cm firm mass was noted on the anterior chest wall in the fourth to fifth intercostal space medial to the left anterior axillary line. Breath sounds were decreased at the left base and fine, basilar rales were heard at the right base. There was no lymphadenopathy or other pertinent findings. Chest x-rays showed a left pleural mass, and additional rib films revealed destruction of the anterior aspect of the left fourth rib.

An open lung biopsy was performed in March 1979 and a large, firm, vascularized mass was found that involved the ribs of the anterior left chest wall without muscle infiltration. Under the microscope, the tumor was seen to be a variant of adenocarcinoma with papillary elements resembling bronchiolar carcinoma, and was similar in appearance to the tumor resected in 1960.

Following recovery from surgery, the patient underwent a course of radiation therapy of 5,000 rads to the chest wall. He remained well for 20 months but then developed evidence of extrathoracic metastatic disease and died in March 1981.

Discussion. That carcinoma of the lung has a generally poor prognosis is a medical truism. In most series, the best survival rates are found in stage 1 disease (Feinstein classification).[1] Prognosis depends in part on histologic type, with some authors noting that localized bronchiolar carcinoma has a more favorable prognosis.[2-6] Nevertheless, in the patient with advanced bronchiolar carcinoma, survival rates are similar to those for other histologic types of lung cancer.[3] In a study by Munnel et al[4] of 12 patients with solitary bronchiolar carcinoma, two had recurrences. After 12 years, one patient had a lesion with similar but not identical histologic appearance; the primary tumor was in the right middle lobe and the recurrence in the right lower lobe. The second patient had a right upper lobe lesion four and one-half years after left upper lobectomy; again, the second specimen was not identical to the previous lesion.

The reason for varying survival rates with different histologic types of lung tumor may relate to tumor-doubling time in solitary lesions. In one report by Weiss et al[7] of 18 single lesions, those with slower growth rates had longer survival times. These constituted, in most instances, adenocarcinomas whose doubling rates were seven months or greater and one bronchiolar carcinoma with a doubling time of ten months. In our patient, the long period between initial surgery and recurrence would be consistent with a prolonged doubling time. To our knowledge, the 19-year interval between initial presentation and recurrence is the longest noted in the literature to date. Although it cannot be proved that our patient had a recurrence of his first tumor many years after resection, the location, cell type, histologic appearance, and known potential for long-term survival speak for a quiescent interval with recurrence of cancer at a later date. While this biologic behavior is more often associated with gastrointestinal tumors, especially colon carcinoma, the fact that it can happen in a patient with lung cancer should be noted.

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Unusual penetrating injury of face and neck

TO THE EDITOR: It has been axiomatic in many centers that if one has to think about doing a tracheostomy, one ought to be doing it or have done it already. In cases of severe facial injury or tracheal displacement, the necessity of airway control generally mandates tracheostomy for general anaesthesia. However, complications vary from 1.4% in adults[1] up to 12% in children[2]; it should never be undertaken lightly.

Case report. An 18-year-old man was referred to the emergency room of The New York Hospital shortly after having received stab wounds of the posterior right neck and mid-face. He had a knife-blade lodged in his upper lip and maxilla. He had eaten several hours prior to injury and had drunk a significant amount of alcohol. The blade had broken off during the patient's attempts to remove it, and he insisted that it not be touched until he was asleep. There had been no epistaxis.

The patient was inebriated but was speaking and swallowing normally without any respiratory difficulty. The neck wound was at the anterior, superior border of the trapezius muscle. The patient could shrug his shoulders normally. The carotid was palpable and pulses were symmetrically strong and present. The trachea appeared to be in the midline. All cranial nerves were intact and there was no neck hematoma or active bleeding.

A knife blade transfixed the upper lip at the right philtrum and was firmly lodged in the premaxilla. Seven centimeters of blade projected above the skin. The mucosa of the superior gingivobuccal sulcus was intact. The mucosa of the nostril floor also had not been penetrated.

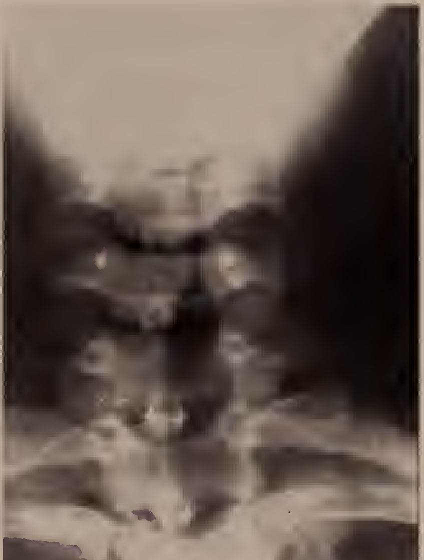
X-rays of facial bones and cervical spine showed the knife lodged in the premaxilla and suggested an artifactual deviation of the trachea to the left, away from the injury, because of slight rotation (Fig).

The patient was brought to the operating room and after preliminary hyperoxygenation by mask held above the protruding blade, he was sedated with intravenous thiopental, his neck prepared and draped for tracheostomy, and rapid sequence induction was effected.

Direct laryngoscopy revealed the trachea to be in the midline, there were no ecchymoses or punctures in the pharynx or hypopharynx with special inspection of the right pyriform sinus. An endotracheal tube was placed without difficulty.

Management from this point was routine. The knife blade was removed and the lip wound closed in layers. A limited exploration of the right side of the neck was effected by extension of the stab wound. The stab wound was found to enter at the anterior border of the trapezius muscle, continue for a short distance medial to its anterior border, and then end blindly. The sinus was approximately 10 cm long; no important structures were injured.

A Penrose drain was placed in the depth of the wound and brought out through the most inferior portion of the incision. The margins of the stab wound were excised and the wound closed in layers. The Penrose drain was removed the following morning after minimal drainage. Convalescence was uneventful.



X-ray of cervical spine suggests deviation of trachea to left.

Discussion. The necessity of a cuffed endotracheal tube for a patient with a full stomach and prior alcohol intake was unquestioned. The safety of preliminary tracheostomy under the conditions of this injury favored its performance. However, since it would be easier to perform one over an endotracheal tube in the event it was indicated, the rapid sequence induction with prior preparation for tracheostomy seemed a good compromise.

The rapid sequence induction allowed direct laryngoscopy to inspect the hypopharynx for injury. The tube could be brought out away from the protruding blade. Any bleeding that resulted from removal of the blade could not interfere with subsequent intubation. Direct laryngoscopy and subsequent neck exploration revealed no important injuries. In this manner, tracheostomy and its possible complications[3] were averted at no risk to the patient.

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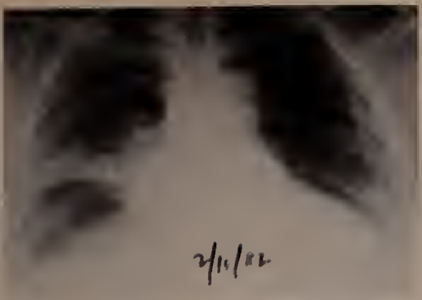
Pulmonary blastomycosis in a New York City resident

TO THE EDITOR: Pulmonary blastomycosis is a fungal disease which in the United States is endemic in the south and south central areas and the regions around the Great Lakes.[1-3] The incidence in New York State is extremely low; the rate per 100,000 population is approximately 0.01 to 0.49.[3,4] The disease occurs in individuals whose occupations give them exposure to soil, such as farming, construction, and forestry,[2] or in people like hunters, who are in close contact with wooded areas at certain times during the year.[5] The source of the fungus appears to be the soil, although attempts to isolate it from soil rarely have been successful.[5,6] We would like to present the case of a patient from New York City with no predisposing exposure history who was admitted with a right hilar mass, suggestive of bronchogenic



Chest roentgenogram showing mass adjacent to right hilum.

carcinoma, which was later diagnosed to be blastomycosis.

Case report. A 54-year-old woman was hospitalized because of a right hilar mass found on a routine chest x-ray (Fig). The mass was not present a year earlier. Except for a weight loss of 20 lb over six months, the patient denied any constitutional symptoms. She did not smoke or abuse alcohol. She had diabetes mellitus of four years' duration for which she was receiving insulin. Results of physical examination were within normal limits. The patient was born in South Carolina and at the age of 14 migrated to New York City. She was a nurse's aide and had no interest in hunting. Bronchoscopic washings, brushings, and biopsy as well as follow-up mediastinoscopy were nondiagnostic. The resected right upper and middle lobe showed a large mass which on histopathologic examination revealed extensive, confluent granulomatous inflammation together with the presence of a few round microorganisms of thick, doubly contoured walls measuring up to 20 μ in diameter. The organisms were identified as blastomycetes. There was no evidence of neoplasm.

Discussion. Human blastomycosis occurs either as an acute or chronic process.[5,7] Organ systems involved by the disease include lungs, skin, and skeletal system and less frequently the urogenital tract, central nervous system, and adrenal glands. Chest radiographic presentations include air space consolidation, fibronodular infiltrates, cavitation, mass lesions, and miliary disease. Mass-like lesions, as in our patient, may be strongly suggestive of bronchogenic carcinoma.[8] The presence of the disease can only be established by demonstrating the fungus in smears or cultures of sputum, bronchoscopic washings, prostatic fluid, or aspirated pus from skin lesions.[9-11] In this case, blastomycosis occurred in a New York City dweller with no history of travel or exposure to the soil or wooded areas. This case points to the existence of blastomycosis in a nonendemic area, even in the absence of predisposing factors and illustrates the importance of including diseases such as blastomycosis in the differential diagnosis of undiagnosed and atypical pulmonary lesions.

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Dormant foramen magnum meningioma 'activated' by chiropractic manipulation

TO THE EDITOR: Chiropractic manipulation of the neck has been associated with transient ischemic attacks,[1] occlusion of the vertebral-basilar artery,[2] intimal tears, and pseudoaneurysm.[3] Atlantoaxial rotation is the significant factor producing acute or delayed symptoms.[4] The large cisterns at the cervicomedullary junction usually accommodate large amounts of extrinsic pressure before neurologic signs develop. I would like to report how a silent tumor in this region was "activated" by chiropractic manipulation.

Case report. A 40-year-old man, a sales executive, developed numbness of the fourth and fifth fingers of the right hand without neck discomfort in November 1980. A neurologic examination at that time revealed atrophy and weakness in the ulnar-innervated hand muscles and generalized hyperreflexia. He did not return for his scheduled appointment, and over the next eight months the entire hand became numb and some neck discomfort developed. He sought chiropractic relief and after six treatments in a two-week period developed gradual weakness of the entire right upper extremity, unsteady gait, and numbness of the left side of the body. Neurologic examination confirmed the above with additional evidence of clonus and spastic hemiparesis. The clinical suspicion of a foramen magnum lesion was confirmed by a large myelographic block (Fig 1) and vertebral angiography revealing a tumor blush (Fig 2). Posterior fossa craniectomy and upper cervical laminectomy resulted in subtotal excision of a fibroblastic meningioma. The tumor bulk was anterior to the brain stem and densely adherent to the left

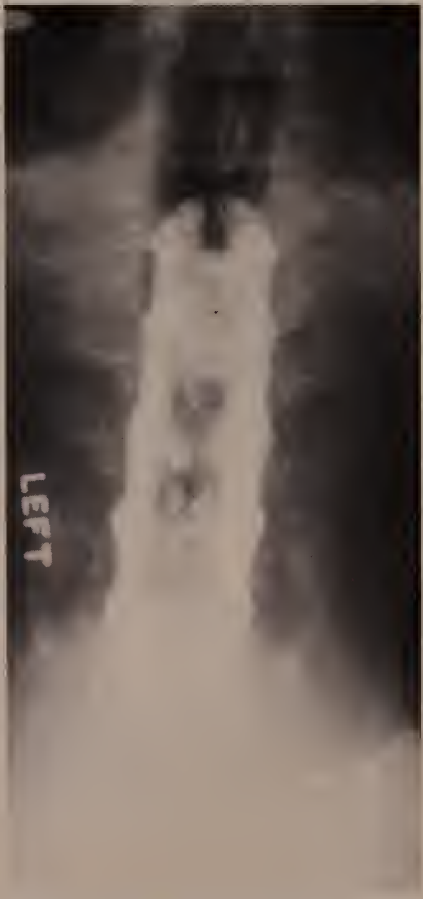

FIGURE 1. Myelographic block at high cervical level by tumor (anteroposterior view).

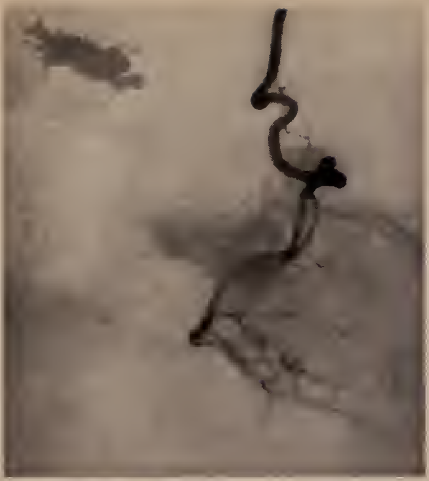

FIGURE 2. Vertebral angiogram demonstrating tumor blush at level of foramen magnum.

vertebral artery. He is now quadriparetic and undergoing physiotherapy.

Discussion. There have been many case reports of vascular complications in conjunction with chiropractic manipulation. This should not be surprising in view of the anatomic relationship between the vertebral artery and the cervical spine. In this patient it is felt that injury to the vertebral artery by tumor and neck rotation predisposed the spinal cord to compromise. This unique case effectively illustrates the potential danger and complications from unwarranted manipulation.

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Requiem for PSRO

TO THE EDITOR: Although the editorial, "Requiem for PSRO" (1983; 83: 687-688), is factually correct and is positive in terms of the accomplishments of the program, I think that additional facts of the current situation should be mentioned.

One of the provisions of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) is that the Secretary of Health and Human Services must continue to finance effective and efficient Professional Standards Review Organizations (PSROs) until a Peer Review Organization (PRO) is designated and a contract signed covering this area. The omission of this provision and the cover of your April issue may have led the reader to assume that the PSRO program would end in June 1983. In fact, all PSROs have funding through September 1983, and Secretary Heckler has indicated that she will be asking Congress for a supplementary appropriation to cover the transition period from October 1983 to September 1984.

As the Medical Society of the State of New York has fostered support for continued peer review under the new PRO program, it would seem appropriate to provide your readership with all the facts related to the conversion from PSRO to PRO.

The 14 PSROs in New York have already made significant progress in reorganizing to prepare for the implementation of PRO while maintaining the main principle of "local" physician peer review.

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In Reply: The editorial was intended to highlight three areas: (1) PSRO accomplishments, (2) the new PRO program, and (3) the role of the Medical Society of the State of New York as a contender to become the prime contractor for the PRO. There was no intent to detail the entire PRO legislation, which at the time the editorial was written was only a proposal.

The only change I would make would be to correct the spelling of my name: it is Prior, not Pryor.

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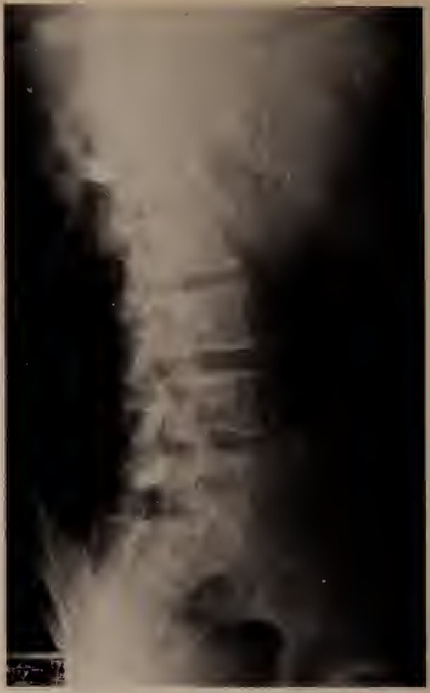
Chest wound and hematuria

TO THE EDITOR: I would like to report a case of a bullet wound in the chest resulting in renal trauma, to remind physicians that the urinary tract must be considered in all cases of trauma, especially when transient hematuria is present.



Intravenous pyelogram with left oblique view demonstrates bullet in right renal pelvis.

Case report. A 35-year-old man was seen in the emergency room with an accidental gunshot wound to the right side of the chest. The point of entry was at the fourth intercostal space near the nipple. There was no exit wound. Vital signs were stable. The abdomen was soft with minimal right upper quadrant guarding. The patient experienced gross hematuria which cleared during his stay in the emergency room. Hemoglobin was 14 g/dL, hematocrit was 40%. An emergency execretory urogram revealed the bullet to be lodged in the right kidney with some extravasation of contrast material (Fig). The bullet was retrieved via nephrolithotomy.

Discussion. This case is presented to reemphasize the point that although the area of trauma seems to be remote from the urinary tract, involvement must still be considered, especially if there is a clue such as transient hematuria. Review of the English language literature from 1966 to the present disclosed only one similar case, reported by Lipson et al in the *Journal of the American Veterinary Medical Association*, of a bullet lodged in the left kidney of a dog without evidence of a bullet wound (1972; 161: 293).

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Prophylactic preoperative insertion of pacemakers in patients with bifascicular block

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ABSTRACT **Should temporary cardiac pacemakers be inserted when patients with bifascicular block undergo surgical procedures requiring general anesthesia? His bundle EKGs were obtained in 50 patients before surgery. Of the seven patients with a complete left bundle branch block, two had a normal HV interval and five had a prolonged HV interval (71%). Of the 43 patients with a right bundle branch block and left anterior hemiblock, 34 had a normal HV interval and nine had a prolonged HV interval (21%). Only two patients complained of dizzy episodes; both had a prolonged HV interval. No episodes of complete heart block occurred. There were no significant differences between preoperative and postoperative EKGs, and no immediate operative deaths. Thus, it appears that the risk of patients with bifascicular block developing complete heart block during major surgery is minimal and these patients do not require pacemakers. However, a larger group of symptomatic patients should be evaluated before the proper approach to this subset of patients is established.**

(NY State J Med 1983; 83:1041–3.)

INTRODUCTION

Patients who develop complete heart block commonly have a preexisting bifascicular block. However, a review of the literature reveals widely differing incidences of progression to complete heart block among these patients.[1-5] Cardiologists are frequently consulted on the advisability of inserting a temporary pacemaker in patients with bifascicular block who require surgery. There has been a fear that the stress of anesthesia and surgery might precipitate a complete heart block. A number of clinical studies have concluded that asymptomatic patients with right bundle branch block and left anterior hemiblock do not require prophylactic temporary pacemaker insertion prior to noncardiac surgery.[6-10]

The introduction of the His bundle electrogram technique now permits measurements of the HV interval in patients with a bifascicular block. Patients who have a prolonged HV interval should be at greater risk of developing complete heart block. There is a paucity of information in the literature evaluating the His bundle electrogram in patients with bifascicular block undergoing surgery.[11] Therefore, His bundle electrograms were obtained in 50 patients with chronic bifascicular block prior to noncardiac surgery. The role of the His bundle electrogram in determining the prophylactic insertion of temporary pacemakers in this group was evaluated.

PATIENTS AND METHODS

Fifty patients with chronic bifascicular block underwent major surgical procedures under general anesthesia from January 1975 to January 1981. Of these patients, 43 showed a right bundle branch block and left anterior hemiblock (Table). There were 26 men and 17 women. The mean age of the group was 69 years. Seven patients had a complete left bundle branch block. There were four men and three women in this group with a mean age of 57 years. The criteria for the right bundle branch block was a QRS duration of 0.12 sec or greater with an rSR′ complex in lead VI. Left anterior hemiblock was defined as an axis at or more leftward than −30° with a small q and tall R wave in lead I and a small r and deep S in lead III. The criteria for a complete left bundle branch block was a QRS duration of 0.12 sec or greater with a broad monophasic R wave in V_6 with ST depression and T wave inversion in leads V_5 and V_6.[12] All of these patients had a first-degree AV block.

All the patients were carefully evaluated prior to the surgical procedures. The presence or absence of dizzy spells or syncopal episodes was elicited in every patient. A His bundle electrogram was recorded in all patients prior to surgery. The PA, AH, and HV intervals were obtained. The normal HV interval is from 35 to 55 msec. Each patient had a 12-lead electrocardiogram taken before and as soon after surgery as was feasible. All had continuous single lead EKG monitoring throughout their surgical procedures and in the recovery room. In addition, all the patients were monitored through induction, intubation, and extubation as well.

RESULTS

On the basis of the electrophysiologic studies, the 50 patients were classified into two groups—those with a normal HV interval and those with a prolonged HV interval.

Of the seven patients with a complete left bundle branch block, two had a normal HV interval and five had a prolonged HV interval (71%). Of the 43 patients with a right bundle branch block and left anterior hemiblock, 34 had a normal HV interval and nine had a prolonged HV interval (21%).

Two patients gave a history of syncope. Both of these patients had a prolonged HV interval. Eleven patients of the 50 had a history of angina pectoris, but only two had a history of a previous myocardial infarction.

All of the patients with a prolonged HV interval had a temporary pacemaker inserted. None of the patients with a normal HV interval had prophylactic insertion of a temporary pacemaker.

Complete heart block was not seen in any patient in this series.

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Characteristics of Fifty Patients

Condition	No. of Patients (Sex)	Normal HV Interval	Prolonged HV Interval	Syncope In Normal HV Interval Group	Syncope in Prolonged HV Interval Group	Angina in Normal HV Group	Angina in Prolonged HV Interval Group
Left Bundle Branch Block	7 (4 M, 3 F)	2	5	0	1	1	1
Right Bundle Brand Block Left Anterior hemiblock	43 (26 M, 17 F)	34	9	0	1	7	2

There were no significant differences between the preoperative and postoperative electrocardiograms. There were no immediate operative deaths.

Discussion

A number of workers have evaluated the risk of developing heart block during anesthesia in patients with bifascicular block.

Berg and Kotler[6] studied in a retrospective manner 26 patients with right bundle banch block and left anterior hemiblock and four patients with left bundle branch block and first degree AV block who underwent surgical procedures. They concluded that the stress of anesthesia and surgery did not precipitate complete heart block in their patients.

Kunstadt and coworkers[7] studied prospectively 24 patients with bifascicular block who underwent 38 operations. Constant intraoperative EKG monitoring did not disclose any episodes of advanced AV block. His bundle electrograms were obtained in only three patients.

Venkataraman and coworkers[8] studied retrospectively 38 patients with a right bundle branch block and left anterior hemiblock who underwent surgical or endoscopic procedures from 1968 to 1973. They concluded that asymptomatic patients with a right bundle branch block, left anterior hemiblock, and a normal PR interval undergoing major or minor surgery do not require the insertion of a pacemaker before operation. If the asymptomatic patient also has a first-degree AV block then a pacemaker is probably not needed. However, the symptomatic patient with a right bundle branch block and a left anterior hemiblock should have a prophylactic pacemaker.

Rooney and associates[9] evaluated 27 patients with a pattern of right bundle branch block and left anterior hemiblock who underwent general anesthesia and surgery. These patients had no recent cardiac problem. None developed a complete heart block. They concluded that the routine placement of a temporary cardiac pacemaker in patients with a right bundle branch block and left anterior hemiblock is not necessary in the absence of cardiac symptoms.

Pastore and his coworkers[10] studied 44 patients with a right bundle branch block and left anterior hemiblock who underwent a total of 52 operations. All the patients had continuous EKG monitoring during the operation. Temporary pacemakers were inserted preoperatively in six patients because of first-degree AV block. There was one episode of transient complete heart block. The authors concluded that temporary pacemaker insertion is rarely required in patients with chronic right bundle branch block and left axis deviation who require noncardiac surgery.

The use of the His bundle electrogram in patients with a bifascicular block now permits measurement of the HV interval. Theoretically, a prolonged HV interval might signify a greater risk to develop complete heart block. One could then consider the use of a prophylactic temporary cardiac pacemaker in such patients prior to general anesthesia and surgery.

Recently, Bellocci and his coworkers[11] performed His bundle electrograms in 98 patients with bifascicular block prior to general surgery and anesthesia. On the basis of electrophysiologic studies, 47 patients had a normal HV interval and 51 had a prolonged HV interval. The prolonged-HV group had a significantly greater incidence of organic heart disease and cardiac symptoms. There was a significantly higher incidence of cardiac intraoperative and postoperative complications in patients with a prolonged HV interval, but none of the patients developed complete heart block. The authors concluded that patients with bifascicular block, even in the presence of presumable risk factors, do not require prophylactic pacing.

In our present study, a prolonged HV interval was found in 21% of the patients with a right bundle branch block and left anterior hemiblock. Bellocci and coworkers[11] found an incidence of 29% in their study. In our study a prolonged HV interval was found in 71% of the patients with a left bundle branch block while Bellocci and associates found an incidence of 72.5% in their study.

Recently Dhingra and his associates[13] analyzed the HV interval in 517 patients with chronic bifascicular block. They found a prolonged HV interval in 64% of their patients with a left bundle branch block and a prolonged HV interval in 24% of their patients with a right bundle branch block and left anterior hemiblock. They also included a small group of patients with a right bundle branch block and left posterior hemiblock in their series. The close similarity of the results in these various reports is striking. Dhingra and his associates[13] also found that patients with a prolonged HV interval have a significantly higher incidence of angina, previous infarction, symptoms and signs of congestive failure, cardiomegaly, more advanced cardiac functional class, and premature ventricular contractions on the resting EKG. The risk of spontaneous complete heart block was small in patients with either a normal HV or prolonged HV interval although it was significantly higher in the latter.

One can now conclude that the risk of developing complete heart block is minimal in patients with bifascicular block undergoing major surgical procedures. In our series no patient developed complete heart block. Patients with a normal HV interval do not require the prophylactic insertion of a temporary cardiac pacemaker. The asymptomatic patient with a prolonged HV interval probably does not require a temporary cardiac pacemaker. The symptomatic patients (dizziness, syncope) with a prolonged HV interval also probably do not require prophylactic insertion of a temporary cardiac pacemaker prior to elective surgery. However, evaluation of a larger symptomatic group of patients is required before the proper approach to this subset of patients is established.

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The subpleural lymph node: a differential diagnostic problem

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ABSTRACT Subpleural lymph nodes described by anatomists have generally eluded radiographic detection. This report presents two radiographically demonstrated cases. The first is a subpleural lymph node discovered by plain film. The second case is the first report of subpleural lymph node detection by computerized tomography. With the increasing application of computerized tomography, more subpleural lymph nodes will be demonstrated, causing confusion with primary and metastatic disease of the lung.

(NY State J Med 1983;83:1043-5.)

INTRODUCTION

Nearly 100 years after the intrapulmonary lymph node was described in an anatomic report,[1] this entity made its first appearance in the radiologic literature in 1961.[2] Only 13 additional radiologically detected cases have been subsequently described in the English language literature.[3,4] The limited number of reports may be explained by the radiologic difficulties in detecting these nodes, usually 1 cm or smaller in diameter, on plain films. Since the advent of computerized tomography (CT), an ever increasing population is being evaluated by this modality, which is more sensitive than conventional tomography.[5] Therefore, when CT is applied in staging a primary lung lesion or in evaluating for the presence of metastatic disease, one can expect that among the many incidental and confusing lesions to be found will be the subpleural lymph node.

CASE REPORTS

Case 1. A 35-year-old asthmatic woman with a 20-year history of heavy smoking was admitted to Beth Israel Medical Center for evaluation of an 8-mm asymptomatic nodule in the right lung. A PA film of the chest demonstrated an 8-mm nodular density in the lateral aspect of the right lower lung field. A chest film three years before was reported as negative. Tomograms in anteroposterior and lateral projections demonstrated a well-defined, noncalcified, noncavitated nodule with no evidence of adjacent pulmonary disease (Fig. 1). The nodule appeared to be located in the right lower lobe in close proximity to the posterolateral chest wall. An intermediate strength PPD was negative. Fiberoptic bronchoscopy was negative. The remainder of the diagnostic evaluation was unremarkable.

Since malignancy could not be excluded, a wedge resection of the right lower lobe was performed. The specimen disclosed an 8-mm nodule just beneath the pleural surface. Histologic sectioning of the nodule demonstrated a subpleural lymph node with a well-formed capsule, germinal centers, anthracotic pigmentation, and evidence of chronic lymphadenitis. At surgery, several soft, 1-cm nodes noted at the origin of the right lower lobe bronchus were resected. These bronchopulmonary nodes demonstrated nonspecific chronic lymphadenitis.

Case 2. A 48-year-old man with a 30-year smoking history was admitted for diagnostic evaluation of an asymptomatic 5-cm mass in the right upper lobe. Chest CT performed to stage the right upper lobe lesion showed no evidence of hilar or mediastinal involvement. However, the scan did demonstrate a 7-mm peripheral nodule in the right lower lobe (Fig 2A) and a second 5-mm peripheral nodule in the right middle lobe (Fig 2B). Both nodules appeared well defined and noncalcified on CT. The right lower lobe nodule could be identified in retrospect on a PA plain film overlying the posterolateral aspect of the right ninth rib (Fig 3). The right middle lobe nodule could not be identified on four views of the chest.

Although the right upper lobe mass had the radiographic features of a primary carcinoma of the lung, the presence of the right middle lobe and right lower lobe nodules raised the possibility that all three lesions were metastatic. A percutaneous aspiration biopsy of the right upper lobe lesion revealed mucin-se-

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creting adenocarcinoma. The problem of tumor origin was not resolved, since primary and metastatic lesions are both compatible with this cell type. In the absence of symptoms to suggest an extrapulmonary primary lesion, it was decided not to undertake an extensive work-up but instead to resect the right upper lobe lesion. At surgery, the first procedure was the identification and resection of the right middle lobe and right lower lobe nodules to determine their nature. Both nodules were easily palpated at surgery and located in a subpleural position. Frozen and permanent sections of both nodules demonstrated hyperplastic lymph nodes with a well-formed capsule, germinal centers, anthracotic pigmentation, and no evidence of tumor. An uncomplicated right upper lobectomy was then performed.

The patient had a repeat CT scan four months after operation. This study confirmed, by their absence, that the right middle lobe and right lower lobe nodules resected were indeed those demonstrated on the preoperative study.

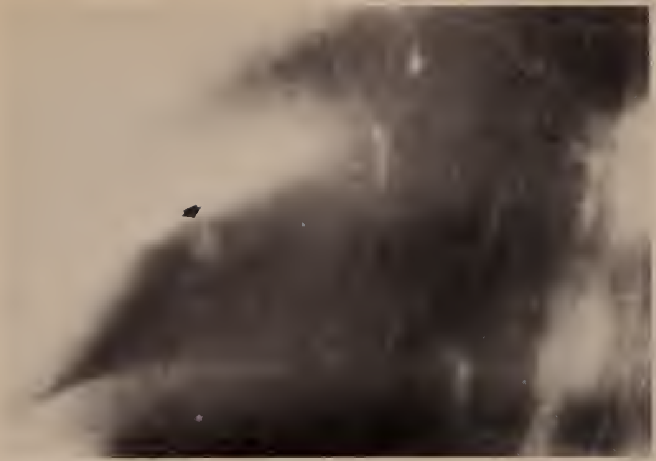

FIGURE 1. Case 1. Anteroposterior linear tomography delineates the soft tissue density (arrow).

DISCUSSION

Intrapulmonary lymph nodes are to be distinguished from mediastinal, hilar, peribronchial, and bronchopulmonary nodes. The vast majority of intrapulmonary lymph nodes occur in a subpleural location. One must bear in mind that a subpleural distribution not only includes proximity to the chest wall but also to the major and minor fissures and mediastinal pleural surfaces.

To qualify as a true lymph node rather than nonspecific lymphoid tissue there must be a well-formed capsule, a subcapsular sinus, and germinal follicles. Whether the intrapulmonary lymph node is congenital or represents lymphoid tissue that has differentiated into a node due to antigenic stimulation has never been resolved. However, in all reported cases in the radiologic literature, including the two cases presented in this article, the subpleural nodes demonstrated anthracotic pigmentation and hyperplastic changes.

Two reports give some clues as to the radiologic plain film detection rate of subpleural lymph nodes. In a cooperative Veterans Administration–Armed Forces series of 887 asymptomatic men with pulmonary nodules under 6 cm, four cases of subpleural lymph nodes were described.[6] Trapnell[7] reported a series of 92 postmortem lungs studied by plain film with lymph node detection in only one patient; this patient had three nodes. In 35 of the 92 cases, pleural lymphatics were then injected with barium, and in an ad-

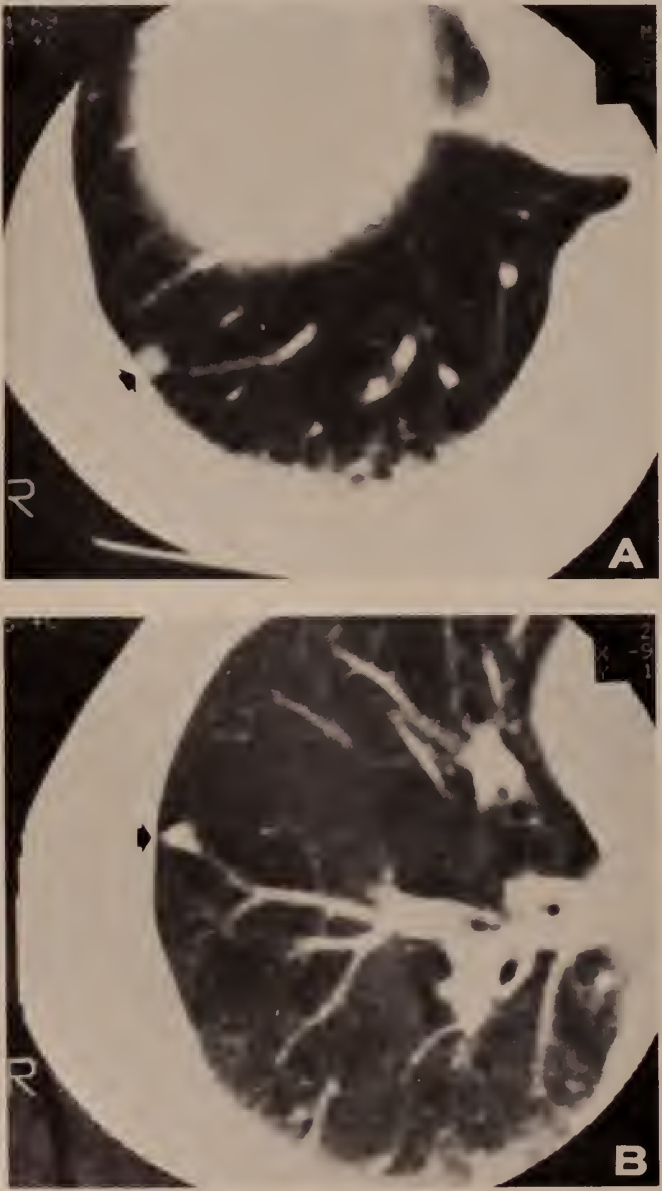

FIGURE 2. Case 2. Magnified CT scans with pulmonary window showing nodules (arrows). (A) Right (B) Right middle lobe.

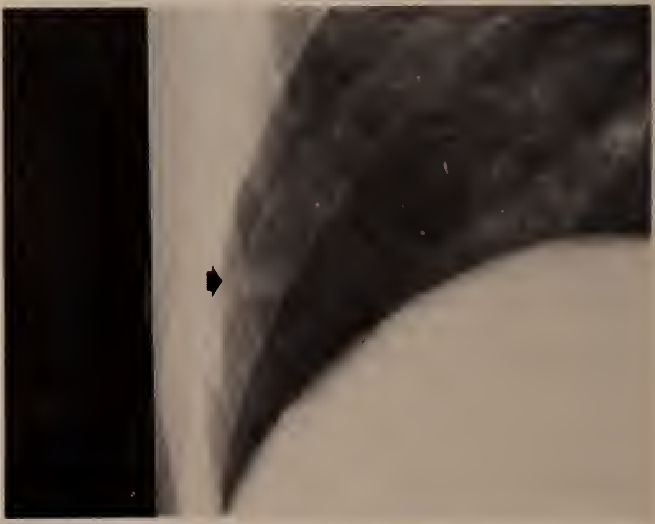

FIGURE 3. Close-up posteroanterior view of RLL nodule (arrow) overlying ninth rib.

ditional five of these cases, lymph nodes were identified. The discovered nodes were all reactive and could not be related to any underlying disease process.

There are no known distinguishing radiologic characteristics of the subpleural lymph node on plain film or conventional tomography. Our CT experience with one case also does not suggest any specific diagnostic criteria. The lymph node appears as a well defined nodule, usually but not always 1 cm or smaller.[2,8,9] A subpleural lymph node may grow during a period of observation.[8,9] Calcification[10] but not cavitation has been described. The subpleural localization is not pathognomonic and is consistent with metastatic disease. It is readily apparent that none of the characteristics, including the exceedingly rare presence of visible calcium, excludes either primary or metastatic disease.

With the increasingly frequent application of CT in the chest, the detection rate for these nodes will increase. The subpleural lymph node, therefore, joins the large group of nonspecific nodules seen on CT, especially in the older age group. The enhancement of sensitivity that CT allows without any commensurate increase in specificity will continue to be a source of frustration in evaluating the pulmonary parenchyma.

Acknowledgment. William I. Wolff, MD, provided clinical material and counsel.

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Bacteremia associated with fiberoptic bronchoscopy

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JOHN O'HERN, MD, DENNIS GORT, MD

ABSTRACT **The type, rate, and magnitude of bacteremia following fiberoptic bronchoscopy was studied in 50 patients. Carefully performed bacteriologic studies included the use of four different blood culture media and quantitative plate counts. Blood cultures were performed before, and five and 30 minutes after, the completion of the procedure. The average time for bronchoscopy was 41 minutes for patients having a biopsy, and 29 minutes for those having inspection and washing only. Bacteremia was detected in a single patient with severe bacterial tracheobronchitis and anaerobic lung abscess. Unless pyogenic infection of the airways and lungs is suspected, routine administration of antimicrobial agents before fiberoptic bronchoscopy does not appear to be warranted.**

(NY State J Med 1983;83:1045–7.)

INTRODUCTION

Manipulation or trauma of the oral, nasopharyngeal, or tracheal mucosa can be associated with bacteremia.[1–3] Factors such as bacterial colonization, degree of trauma, or the nature of the mucosal manipulation influence the rate and type of bacteremia associated with oral procedures.[3,4] The clincial importance of these bacteremia events is related to the type of organism causing bacteremia, the immunologic status of the patient, and the presence of specific anatomic defects, such as valvular heart disease or joint prosthesis. Examination of the tracheobronchial tree with the fiberoptic bronchoscope is a common diagnostic or therapeutic procedure. Several case reports indicate that complications related to infections can accompany procedures associated with the use of fiberoptic bronchoscopy.[5–9]. The need for antimicrobial agent prophylaxis and the efficacy of this prophylaxis for patients undergoing bronchoscopy have not been demonstrated, but recommendations for patients thought to be at risk for endocarditis undergoing oral procedures including bronchoscopy have been published.[10]

The purpose of this prospective study was to detect the type, magnitude, and frequency of bacteremia following fiberoptic bronchoscopy with a careful clinical evaluation of the patients and the use of modern sensitive bacteriologic techniques for detection of aerobic and anaerobic microorganisms.

From the Departments of Medicine, Infectious Diseases (Drs Smith and Baltch) and Pulmonary (Drs Sahetya and Gort) Sections, and Thoracic Surgery (Dr O'Hern), Veterans Administration Medical Center, Albany Medical College, Albany, NY. Dr Sahetya is now with The Medical Center at Bowling Green, Bowling Green, KY.

This research was supported by the Medical Research Service of the Veterans Administration.

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METHODS

Patients. Fifty hospitalized patients (48 men and two women) from the Pulmonary and Thoracic Surgery Sections of the Albany Veterans Administration Medical Center with clinical indications for bronchoscopy were entered into this study. Their mean age was 59 years (range 34 to 72). Informed consent according to the requirement of the Human Studies Committee of the Albany Medical College–Veterans Administration Medical Center was obtained from all patients. Of the 50 patients, eight were receiving beta-lactam antibiotics (penicillin G—five patients, penicillin and oxacillin, ampicillin, cefazolin—1 patient each) and one patient was receiving rifampin for therapy of bronchopulmonary disease. No patients were febrile (rectal temperature not above 37°C). Three patients were receiving corticosteroids and one patient was receiving alkylating agents. Major indications for bronchoscopy were as follows: diagnosis of neoplasm, 24 patients (48%); inflammatory process, 10 (20%); complication of neoplasm, 5 (10%); abscess, 6 (12%); and other conditions, 5 (10%).

Bronchoscopy procedure. All patients had an intravenous catheter or needle placed before the procedure. Intravenous diazepam or meperidine or both were given for light sedation. Lidocaine (4%) was atomized into the nares, nasopharynx, and oropharynx, and pledgets soaked with 4% lidocaine were used to anesthetize the pyriform sinuses. Subsequently, 3 ml of 2% lidocaine was used to anesthetize the vocal cords and trachea. A fiberoptic bronchoscope (Olympus, Model BF-1T) was introduced through the nasal passage after lubrication of the distal 5 cm of the instrument with 2% lidocaine viscous. The airway was inspected and a bronchial washing was performed with sterile saline. In six patients transbronchial and in 22 patients endobronchial biopsies were performed. The average time for bronchoscopy was 41 minutes (range 20 to 60 minutes) for patients having a biopsy, and 29 minutes (range 15 to 45) for those having inspection and washing only.

Blood cultures. Blood for culture was obtained by separate venipuncture before bronchoscopy and 5 and 30 minutes after the procedure. The skin was cleansed with povidone-iodine using three scrubs. Eight milliliters of blood were placed into 100 ml trypticase soy broth (Difco, Detroit, MI), and 4 ml into 50 ml of thiol (Difco), brain heart infusion broth (Scott, Fiskeville, RI) and brain heart infusion broth–prereduced (Scott), respectively. All media bottles had a partial vacuum with 5% CO_2 and contained 0.03% sodium polyanethol-sulfonate. Blood cultures were incubated at 37°C, observed for bacterial growth daily, subcultured in 24 to 48 hours and again at 14 days. Subcultures were performed using fresh 5% horse blood agar plates supplemented with hemin, yeast extract, and vitamin K, and incubated at 37°C in 5% CO_2 for aerobic growth, and in Gas-Pak jars with disposable hydrogen-carbon dioxide generator envelopes with a palladium catalyst for anaerobic growth (BBL, Cockeysville, MD). Aerobic plates were read in 24 to 48 hours and anaerobic plates in 72 to 96 hours. Quantitative pour plates were performed in 13 patients by adding 1.5 ml of blood to 15 ml trypticase soy agar for aerobic growth and into Schaedler's agar for anaerobic growth. The plates were incubated at 37°C under appropriate conditions and inspected as described above.

Following the identification of individual bacterial strains from subcultures, final speciation was performed at the New York State Department of Health, Division of Laboratories and Research, Albany, New York. Identification of aerobes was done using conventional methods.[11] Gram's stain, colonial morphology, biochemical analyses, and gas liquid chromotography were used for the identification of anaerobes.

RESULTS

Microorganisms most frequently associated with endocarditis or other intravascular infections were isolated from only one of 50 patients. This patient had purulent tracheobronchitis and lung abscess resulting from aspiration and he was receiving no antimicrobial therapy. Before bronchoscopy, he had bacteremia with *Staphylococcus aureus* and a nonhemolytic streptococcus. Five minutes after the procedure, which included endobronchial and transbronchial biopsies, he had bacteremia with *Veillonella alcalescens*, *Actinomyces sp*, group C *Streptococcus*, nonhemolytic *Streptococcus* (not group D), *Streptococcus salivarius*, and *Micrococcus sp*. Thirty minutes after the procedure, *Micrococcus sp* was detected in one of four media used.

Quantitative pour plates were performed in 26% of patients. Pour plates from the patient who had positive blood cultures in liquid media were negative, as were the remaining sets of plates.

Of 600 blood culture bottles in this study, 12 (2%) were considered to have contaminants based on the presence of *Corynebacterium sp*, *Propionibacterium sp*, *Bacillus sp*, or coagulase-negative staphylococci. Ten (89%) of 12 contaminated specimens occurred in the prebronchoscopy samples and only two (11%) occurred in the postbronchoscopy blood samples.

No patients developed fever, pulmonary or other infections following bronchoscopy.

DISCUSSION

With the use of careful bacteriologic techniques, including four blood culture media and meticulously performed aerobic and anaerobic subcultures, the present study demonstrates that bacteremia is observed infrequently following fiberoptic bronchoscopy. One patient with untreated purulent tracheobronchitis and lung abscess had polymicrobial bacteremia before (two bacterial species) and following bronchoscopy (six species, including three species of streptococci) and biopsies. Five other patients with lung abscess or pneumonia who also had bronchoscopy were receiving antibiotics at the time of the procedure. None of these patients had positive cultures of the blood before, during, or after bronchoscopy.

Previous reports by Kane et al[12] and Pereira et al[13] reported no bacteremia in 143 patients undergoing fiberoptic bronchoscopy. In one study,[12] only one blood culture medium was used and inspection and Gram's stain rather than subculture were used to detect bacteremia. The study of Pereira et al[13] did not describe subcultures, but two types of media were used. Our study, using careful bacteriologic techniques, detected bacteremia in only one of 50 patients.

These findings are in contrast to data reported by Burman et al,[14] in which bacteremia was observed in 33% of febrile patients, but not prior to four hours after rigid bronchoscopy. Our previous studies[3] and those of Berry et al[4] demonstrated bacteremia in 34.5% and 16% of patients following nasotracheal intubation for anesthesia. The reasons for a difference in bacteremia rates between nasal intubation and bronchoscopy are not known. Although we did not quantitate mucosal trauma with bronchoscopy, we believe that it is less than that seen with intubation because of the smaller size and greater flexibility of the bronchoscopes. In the studies of LeFrock et al,[15] bacteremia was found after nasotracheal suction in 16% of intensive care unit patients but in none of the healthy controls. This suggests that mucosal trauma in the presence of airway colonization is more likely to lead to bacteremia.

Using precise bacteriologic techniques we have demonstrated that bacteremia following bronchoscopy occurs only rarely. There was no association of bacateremia with the duration of bronchoscopy, endobronchial brushing, or biopsy. Because of rather severe polymicrobial bacteremia in the untreated patient with lung abscess, penicillin prophylaxis could be considered for such patients. However, we do not recommend routine antimicrobial prophylaxis for most patients undergoing fiberoptic bronchoscopy.

Acknowledgments. The identification of all blood culture isolates was confirmed by Mehdi Shayegani, PhD, New York State Department of Health, Division of Laboratories and Research, Albany, NY. Judith Dean provided secretarial assistance.

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PAUSE

This poem appeared originally in 1979 in the Suffolk County Medical Bulletin.

September

The line has been breached,
And Summer, running down hill,
Will start panting while
Showing the usual signs of old age.
It will begin to stumble, stutter, trip
And finally admit to poaching.
It will then lay down and
Await its own rejuvenation on
Some other faraway day.

Meanwhile Autumn, expecting
Its turn, will make its stand
By, ever so softly, wafting
A fresh and cooling zephyr.
It will then take on gender
And you and I will greet
And welcome her
As she extends her hand
So better to lead us almost
Imperceptibly toward our next
Inevitable meeting.

JOSEPH H. WERK, MD
Port Jefferson, NY

The Doctors in my life

ABRAHAM BLINDERMAN, PhD

He who saves one life has saved the world—**The Talmud**

In Franz Kafka's "A Country Doctor," a tormented physician is driven by a diabolic groom at greater-than-missile speed to the bedside of a farmer's son who is ailing. Drawn by supernatural horses who are endowed with superior intelligence, the sled arrives at the farmstead almost instantaneously. The patient's sister offers to take the physician's coat, the father offers him a glass of rum, and the grieving mother urges him to attend to her son. After a cursory examination of the worried lad, the physician assures the family that the boy is well. But the family is disappointed and the whinnying of the omniscient horses—perhaps an edict from heaven—motivates him to reexamine the boy. To his horror, he discovers an open wound in the boy's right side, near the hip. The wound is mortal; he can do nothing to save the boy. Meanwhile, the family is happy since the physician now is seriously pondering the boy's illness. Their faith in him disturbs him, but then he recalls how ill-treated he was by the district's people, the many false alarms to which he had responded, and the selfishness of the people only a few hours ago when he had sent his servant girl on a vain mission to borrow a horse to replace his own horse that had died in the night. He was always generous to the poor who paid him little for his services. Chagrined that he had failed in his initial diagnosis—he had not noted the bloodsoaked towel held by the sister until later—and frustrated by the people's lack of understanding—"always expecting the impossible from the doctor"—Kafka's expressionistic physician powerfully exemplifies the ongoing anguished paradox of the physician who must accept hopeless missions in behalf of laities that understandably seek miraculous ministrations from him.

Although I have never known a "country doctor," I believe that the family doctors of my boyhood years in the East Bronx resembled this diminishing species closely. Much of the East Bronx in the '20s had rural vestiges. My own street, Minford Place, was a mix of apartment houses and small frame houses with large back yards. Across the street from my tenement dwelling, an Italian junkman grew corn, assorted vegetables, and sun flowers; three or four goats wandered over a yard covered with the unwanted miscellanea of the neighborhood's families. Our street was covered with cobblestones over which many horse-drawn vehicles clattered. There were no farms remaining on West Farms Road, but the immigrants who occupied the small, quaint homes in the area grew tomatoes, peppers, and legumes in abundance; some even bred chickens and ducks.

When someone in the family was ill, the family doctor was called for; in some cases, the local pharmacist was consulted, for to many immigrants the pharmacist was a prestigious fellow in the old country. The doctor's visit to our household was a ritual that I remember vividly. Hours before his expected arrival, we scrubbed the floors, put things in place, and made sure that clean towels hung in the bathroom. When he entered the apartment, we all greeted him effusively. My mother handed him a clean towel and a small spoon with which to depress the tongue for examination of the throat.

Usually, he found no serious symptoms of disease in the children he visited, but when he chanced on a case of measles, whooping cough, diptheria, or scarlet fever, he would inform the Board of Health; soon, an agent of that estimable organization would arrive with posters in loud, red ink that warned the public to stay away from this apartment. Affixed to the door housing the afflicted, the quarantine signs were quite common in the tenements of the '20s. Since vaccination against smallpox was widespread, I do not recall any smallpox posters in my neighborhood, but I do recall being very depressed when I saw the pox pits on the face of a handsome young man in my sister's social circle; Larry's ravaged face drew my attention whenever I saw him. I was not ten years old yet but already believed that I would someday become a physician, able to battle insidious germs responsible for all the deformed "Larrys" and for thousands of children quarantined because of the malicious germs they hosted.

There were Mongoloids, incurable cripples, and diabetics on our street and I wondered why physicians could not heal them. It was sad to be with children handicapped for life. In the moving pictures I saw, physicians performed miraculous operations that enabled the lame to walk, the blind to see. But in the real world, legions of children were doomed by birth, accident, degeneration, or infection to lives of enduring anguish. Once, when I was resting after a vigorous game of hide-and-seek on the lawn of my uncle's farmhouse in Pennsylvania, my cousin Morris propelled himself in his wheelchair to the tree against which I was leaning. Three years my senior, he smiled at me through his thick-lensed spectacles. "Abe," he said softly. "How nice it would be to run after the girls like you and the other boys do and to kiss them. I'd love to get married some day and have some kids, but I guess that's only a dream."

His words pained me. I could not believe that this unfortunate person had thoughts of love and marriage. Involved in my own doings, I had failed to consider that

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physically crippled children could entertain the same feelings as did fit children. Morris was brave. He submitted to operation after operation, hoping that his lifeless limbs would be animated by surgical art. It was not to be; however, Morris lived a full life of the mind and overcame his hardships by educating himself, traveling, working, and writing.

When I was about 14, I joined the Young Men's Hebrew Association (YMHA) on Fulton Avenue in The Bronx. All new members were asked to participate in the association's club program. Eventually, I became one of the "Sols," a club that I thought was named after a prominent adult. Since few high school students studied Latin in the '20s, how could I know that "sol" was the Latin word for the sun? Happily, our club was counseled by a young physician who told us fascinating stories about mental patients in asylums. Of course, his anecdotes were stereotypes: the patient who thought he was Napoleon, the man who swore he had a large hole in his back, the lady who insisted that she was a Martian princess. We admired our counselor who always found time away from his rigorous medical schedule to introduce young boys to good reading, exciting drama, and occasional nature probes in the parks of The Bronx.

In my late teens, my parents made an appointment for me to see James Tesler, MD, a gastrointestinal specialist with offices on President Street in Brooklyn. I had been complaining of abdominal pains for many months and heeding the advice of relatives in Brooklyn who were unreserved in their praise of Dr. Tesler's medical skills, my patents decided that I should submit myself to his lauded scrutiny.

A former pharmacist who fulfilled his aspiration to become a physician, Dr. Tesler was a patient diagnostician, a reasonably successful therapist, and a congenial adviser. His medical rank never distanced him from his patients. How many times he discussed a novel or a political event with me after completing his medical chores while a roomful of patients waited their turn for his ministrations. Once he sighed and said distressfully: "So many people of forty come to me with bodies of sixty-year olds and expect me to work miracles for them." I had not read "A Country Doctor" in those years but I can understand the lament of sentient physicians of whom more is often expected than the debilitation of the human organism warrants. Dr. Tesler was adamant in prescribing his universal dietary regimen—really a triad of prohibitions. To maintain alimentary sanity, he preached the following canon: "Thou shall not eat spicy foods, fried foods, sugared foods." Since most of his patients ate irrationally, I believe his famous "don'ts" were known throughout Brooklyn.

My gastrointestinal examination included fluoroscopy, but Dr. Tesler saw nothing alarming as he examined my interior. However, but two weeks later, I had some occasion for alarm. Posting the x-ray films of my sigmoid colon on the illuminator in his office, he directed the pointer to a dark shadow on the film, saying, "at first I thought you had an intestinal obstruction which is very serious. But watch this." He withdrew the film and replaced it with another, "Note how normal this film is." Of course I was happy to hear him use the word normal but I must confess that I could not see much that made sense to me in the cloudy configurations on the screen.

"A spastic colon is better than a cancerous colon," he told me later. "For the rest of your life, I recommend that you avoid spicy foods, fried foods, and sweet foods. You are too young to have intestinal problems that older people have. Now tell me, what are you reading in English classes now?"

During my visits to my relatives in Brooklyn, I met Samuel Kavaler, M.D., the lodge physician of the Young Men's Association of Torchiner. Until recently, the lodge served the immigrant Jew well. Coming to a new land, often penniless, he found the members of the lodge who had come from his town or village in the old country ready to find him an apartment, a job, and even a wife. In addition to its social functions, it was a cultural center. The lodge invited literary and political celebrities to lecture at its meeting hall; it promoted theatrical and musical events and encouraged its own members to contribute their talents after business meetings. Esteemed among its members were the physician and the attorney. The physician was revered and the attorney, addressed as counselor, was admired. The lodge bought large tracts in cemeteries to bury their dead. From birth to death, a member was assured of devoted care from his peers.

Dr. Kavaler was the well-liked physician of the Torchiners. My wife's parents came from a small town in Poland and were fond of their good doctor there. An uncle of my wife told me that her father, a tailor, had bought a pair of shoes for Dr. Kavaler when the latter was a medical student. Because of this act of kindness bestowed on him when he was an impoverished medical student, Dr. Kavaler later delivered all of my mother-in-law's four children, gratis. When he learned that I was to marry Benjie's daughter, he insisted on our having the blood tests taken at his office. Later, when he heard that our firstborn was to be delivered by a specialist, he was bitter. "Why didn't she come to me?" he complained to my father-in-law. "Didn't I do well with your four children? If she needed a specialist, would I not have sent her to one?"

But he forgave us. Now, like so many other of the Torchiners I knew, he's dead; many others are living out their remaining years in Florida. Sons and daughters of the immigrants see no reason for perpetuating old world institutions. The lodges are dying, but while they lived, they burned with a glow that the children will never experience.

The physicians of my later years rarely manifest the personal interest in me that the physicians of my earlier years had, but I have known two whose renaissance virtuosity has fascinated me. William Ober, M.D., a pathologist and writer, was very kind to me when he edited several articles I had written on medical history. He introduced me to the art of eating Chinese food with chopsticks at a Chinese restaurant near Columbia University. We journeyed from there by subway to the Museum of Modern Art where he bought three or four recent catalogs. Our next stop was at a celebrated music shop; here he bought two new recordings of the Philharmonic. I casually mentioned that my wife played the mandolin and would like a copy of Vivaldi's famed mandolin concerto. "Wait," he said. He looked among the string disks and pulled out the very record I wanted. A fine physician, a superior writer, and a disciple of the fine arts, he is a rare fellow for our specialized times.

The mandolin brings to mind another physician I admire, James Zilinsky, M.D.—mandolinist, photographer, horticulturist, teacher of celestial navigation, and craftsman. A lover and collector of plectrum instruments, Dr. Zilinsky plays first mandolin for the Long Island Mandolin and Guitar Orchestra on the very instruments he has built. His superb photographs of people and places taken on his extensive travels have hung in exhibition at many showings. In retirement, he leads a full and creative life. He recalls to mind a surgeon who relaxed himself between tonsillectomies by painting oils in a large studio adjacent to his operating room.

The precise scalpel of Morgan Mansfield, M.D., gave me added life seven years ago when he resectioned my wayward colon. My present physician Eugene Aranow, M.D., is trying to contain my hypertension, angina pectoris, atrial fibrillation, and attendant vascular woes with daily doses of diuretics, digoxin (Lanoxin), propranalol hydrochloride (Inderal), micropotassium, and, in dire moments, nitroglycerine tablets.

At 66 I still function adequately. I teach several classes, write occasionally, and lecture on rare books about three times a year. I still regret that I lacked the will and the acumen to follow my boyhood aspirations to become a physician. I suppose that *The Microbe Hunters* and *Arrowsmith* still inculcate idealistic youths to follow the paths of Hippocrates and Osler, but I believe that many intelligent young people are pained by the dichotomous use of science today. Why struggle to obliterate cancer when in thousands of laboratories throughout the world, ingenious scientists struggle to perfect weapons of mastery. Physicians give life; physicists, albeit unwittingly, may take it away.

The medical profession has achieved wonders in my lifespan. The hideous posters of my boyhood announcing quarantines of once-epidemic infectious diseases are now collector's items. In surgery, miracles undreamed of 50 years ago are commonplace today. But the canon of the Hippocratic oath is too lofty for all who swear to honor it impeccably. A degree does not necessarily confer upon a man honor, courage, love, pity, and compassion, some of the virtues that William Faulkner demands in the writer.

I have had my moments of anger, bitterness, and resentment with physicians. I have forgiven inept diagnoses and arrogant rejoinders to civil questions. I understand the awesome decisions physicians must make and the sadness that envelops them when mortality follows a favorable prognosis.

I should have been happy as a physician. Critics' barbs notwithstanding, medicine is the noblest of professions.

FROM THE LIBRARY

ON DOCTOR'S SONS.

Doctor's sons pretty generally make good doctors; that is, if they decide to study medicine and be doctors at all, they succeed. When you hear a physician say that the practice of medicine is a dog's life, and that if he had it to do over again he would never study medicine, that patients are ungrateful and give him little thanks or pay, you may be pretty sure that his son will not study medicine; and if perchance he should, he is terribly handicapped by a lot of bad medical traditions. The unsuccessful doctor does not let his son study medicine. The doctor's son who does study medicine is quite invariably the son of the man who was successful enough to find joy in his work, and who could wish his son nothing better than to enter into the calling which had meant so much to him. And the boy saw in his father's life something that excited his admiration to emulate and covet. As a matter of fact and observation the son of the really successful doctor commonly does study medicine; and I can name a number of such men who attained to even greater success than their fathers.

However, the decision as to whether a man is successful or not does not rest with you or me —the decision is with him—he is the only one who knows.

—Anonymous
NY State J Med 1907; 7:331.

Petit Mal Epilepsy

An early American report

JAMES A. LEWIS, MD

By current usage, petit mal epilepsy refers to a seizure disorder which begins in childhood and is characterized by frequent, brief absence attacks. The absence seizure consists of a lapse in consciousness while posture is maintained. The patient may have a blank stare during the seizure, small myoclonic twitches of the face and fingers may occur, or there may be definite automatisms. The automatisms are typically simple perseverations of behavior occurring at the time the seizure begins. The patient may be unaware that a seizure has occurred.[1]

Various forms of nonconvulsive seizure have been recorded since antiquity, but absence attacks were slow to be recognized as a specific entity. Tissot gave the first clear description in 1770.[2] Sieveking is usually credited with the first English language report in 1861.[3] Absence seizures were lumped in with various other forms of "minor" epilepsy throughout the 19th century, and not until Adie's[4] report of petit mal (which he called pyknolepsy) was there general acceptance of this as a distinct form of epilepsy in the English literature.

I would like to recall an early American report of absence seizures which clearly identified them as a specific form of epilepsy. The paper, published by John Stearns in 1810,[5] has been overlooked by historians of epilepsy. Under the title "A Case of Catalepsy," Stearns described an 11-year-old boy:

> In the winter of the year 1804, he was first observed by his preceptor to pause in reading his lesson; this was then ascribed to a voluntary dumbness; and it was not till the recurrence of several paroxysms, that it was suspected to be the effect of disease. A few days after its first appearance in the school, it was discovered in the family by his mother, when one of his brothers, a school fellow, remarked that "Philo is dumb again." This induced her to inquire into the particulars, of which she soon afterwards gave me full information. As she expected no relief from medical aid, I made no prescription, but occasionally called to learn the progress of the complaint. In the paroxysm I could observe no unusual variation in his countenance, except an involuntary unmeaning stare, and trifling dilation of the pupil. His muscles were not generally in a state of rigid contraction, but relaxed and susceptible of motion, although they did not possess the power to move. He remained perfectly motionless, and during the continuance of the fit retained the posture he had assumed at its accession. To this observation there is one remarkable exception. If he was walking when attacked, he never stopped, but continued to pursue the same direct course until the fit ceased, unless prevented by some intervening obstruction. The voluntary muscles, in this instance, were in full exercise, while the power of volition was entirely suspended. The time passed in the paroxysm was to him totally annihilated; he connected the last idea he had before the accession of the fit with the first one that occurred after its cessation, and resumed the subject he was pursuing, as if nothing had intervened. If he was reading, or relating a story, or pursuing any amusement or employment of any kind, he was sensible of no interruption.
>
> The paroxysms occurred irregularly ten times in twenty four hours, and never exceeded three minutes in duration. His pulse has ever been natural, and no morbid action has disturbed any of the functions of his system.

After four years of observation, Stearns treated him ". . . on the presumption that it was nearly allied to epilepsy," using the accepted anticonvulsant drugs of his day, first silver nitrate, then lead acetate. The patient subsequently became seizure-free.

There can be no serious doubt that this boy's frequent, brief absence attacks accompanied by perseverative automatisms were those of petit mal. Stearns was able to recognize that his patient had epilepsy even though there were no convulsions; Tissot's patient had only a few absence seizures, intermixed with abundant major convulsions. It is curious that widespread recognition of petit mal as a distinct entity did not follow the appearance of this publication. The explanation probably relates in part to the chaotic knowledge of epilepsy in general at the time, as well as to the relative rarity of petit mal in a pure form. Also, Stearns's use of the term catalepsy in his title obscured the importance of his observation; this label was used in the 18th and 19th centuries for a variety of conditions relating to what we would call catatonia, and had been recognized for many years as having functional implications.[6]

There is no evidence that Stearns was aware of Tissot's earlier work. Stearns, born in 1770, graduated from Yale in 1789, before French was part of the curriculum; Tissot's books were not in the Yale library at that time, according to a conversation with J. Schiff (July 1980). There is no evidence that neurologic problems were of special interest to him. Although he published two papers[7,8] on the relationship of mind to disease, he also published on the influence of climate and geology on health, on whooping cough, and on liver disease. His major scientific contribution to medicine was the introduction or ergot into obstetric practice.[9]

His real interest appears to have been medicine as a profession. When he began his practice in upstate New

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York in 1793, issues of medical training, licensing, and other aspects of professionalism were just beginning to be dealt with; he contributed significantly to the professionalization of American medicine. He was a founder of the New York State Medical Society, and became its first secretary in 1807. He presided over the Society from 1818 to 1821. In 1847, a year before his death, he became the first president of the New York Academy of Medicine.

In 1903, it was said that: "It is to Dr. Stearn's efforts more than those of any other one man that the present legal position of the medical profession is due."[10] It is ironic that numerous later works on early American medicine do not mention him at all, or recall him only as the discoverer of pulvis parturients. He could also be recalled as the American who independently discovered petit mal.

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FROM THE LIBRARY

The recommendations in regard to the care of epileptics and paralytics are in accordance with the demands of medical science and the dictates of humanity. There are in the county poor-houses and other county receptacles, as well as in private families, in this State, a large number of these helpless people. In Europe much attention has been given to the care and treatment of epileptics and paralytics, and suitable hospitals established for their reception, no less than six institutions being in London alone. In the State of New York epileptics, at public charge, are generally treated as common paupers, and the disease ignored. A few of the most dangerous and troublesome are sent to the asylums for the insane, where, as the President justly remarks, they are a source of annoyance, and are improper cases for treatment among the insane.

Your committee would recommend, as the sense of this Society, the establishment of a State hospital for epileptics and paralytics. With a view of giving practical force to this recommendation, they would suggest the following resolutions:

WHEREAS, There are in the State of New York a large number of epileptics and paralytics, for whose treatment and custody no proper or adequate provision exists, and who are mostly of the pauper and indigent classes; and,

WHEREAS, These unfortunates, from the nature of their malady, are unsuitable persons to be kept in private families, and are not only sources of distress, but often dangerous to themselves, their families and community; therefore,

Resolved, That it is the sense of this Society that proper provision for the custody and treatment of epileptics and paralytics requires the establishment of a special State hospital.

—Transactions of the Medical
Society of the State of New York
February 4, 1873

* * *

THE POINT OF PROGNOSTIC VALUE

At Sonyea, where we have nearly 1,100 epileptics of all grades, we classify them mentally for practical purposes, under six heads, "good," "fair," "feebleminded," "imbecile," "idiotic," and "demented." Only those whose minds are good or fair are capable of much improvement or cure. True epilepsy tends to the destruction of the mental faculties in every case, the memory showing impairment first. The prognostic point in epilepsy upon which I place most value is the mental condition.

If the mind has in no wise suffered as a result of the seizures, no matter how long they have lasted, there is always a possibility of cure. I have witnessed cures after eighteen years of epilepsy, during which time more than 60,000 seizures had occurred.

—WILLIAM P. SPRATLING, MD

Methods of Research into
the Causes of Epilepsy.
NY State J Med 1906; 6:388.

* * *

New York State should have laws with proper penalties attached, prohibiting the inter-marriage or cohabiting without marriage of those plainly defective such as the epileptic, feebleminded, insane, confirmed criminal, inebriate, etc. These laws should also make it a serious offense for any person of sound mind to marry or cohabit with or to aid others in marrying or cohabiting with any such epileptic, insane, feebleminded, criminal or otherwise mentally defective individual.

Why does not New York State come forward in this matter of prevention as well as it has in its active campaign against tuberculosis?

—WILLIAM T. SHANAHAN, MD

The Care and Treatment
of Epileptics.
New Y State J Med 1911; 11:24

Tick-borne ulceroglandular tularemia

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Tularemia is a febrile illness caused by *Francisella tularensis*, a small aerobic, gram-negative coccobacillus. This zoonotic disease is most often thought to be associated with the handling or ingestion of infected rabbits (hence the popular appellation "rabbit fever"), but blood-sucking insects, especially ticks (*Dermacentor andersoni*, *Dermacentor variabilis*, and *Amblyomma americanum*) are the most commonly identified vectors of tularemia in this country.[1,2]

We recently cared for a young boy with serologically confirmed, tick-borne ulceroglandular tularemia and present his case to heighten physicians' awareness of this infectious disease, as well as to emphasize the tick as vector, persistence of positive tube agglutination titers following recovery, and a conservative approach to the management of associated lymphadenopathy.

CASE REPORT

A four-year-old boy from Suffolk County, Long Island, NY was referred to the Nassau County Medical Center on May 28, 1982 for evaluation of fever and chronic suppurative lymphadenitis unresponsive to surgical and medical therapy. He had been in good health until May, when he complained of a "bump" on his head. The patient's father discovered a tick on his occipital scalp and removed it whole with pliers. An erythematous papule at the site of the bite and a nonerythematous gland in the left occipital region were noted. Three days later, he became febrile to 38.9°C and remained febrile at night to 39.4°C over the next three days.

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On the seventh day of illness, he was brought to a local hospital emergency room for fever, erythematous scalp lesions, and left-sided cervical adenopathy. A complete blood count there revealed a WBC count of 7,900/mm^3, with a differential of 28% neutrophils, 10% band forms, 58% lymphocytes, 3% monocytes, and 1% eosinophils. Platelets were adequate in number. Ampicillin was prescribed and taken orally for three days.

At that time the patient was brought to his private pediatrician for lethargy and persistent evening temperature elevations to 39.4°C. A throat culture, which proved to be negative for group A beta-hemolytic streptococcus, was obtained and the patient's medication changed to dicloxacillin.

Three days later the patient was referred to a surgeon for evaluation of the left occipital node which had become erythematous, warm, and tender. The node was incised and drained of purulent material. No organisms were seen on Gram's stain and culture for aerobic bacterial pathogens was sterile. A right cervical node was also noted to be enlarged but did not require surgical intervention.

One week later, a left cervical node became enlarged and erythematous, and the next day dicloxacillin was discontinued because there had been no clinical response.

On admission four days later, the patient was alert, active, and in no acute distress. Temperature was 37.4°C, pulse 124 beats/min, respirations 24/min, and blood pressure 110/60 mm Hg. Positive physical findings were limited to the scalp and lymph nodes. Erythematous, ulcerative lesions were noted at the 3 × 2-cm tick bite site on the scalp and the previously drained left occipital node, which was similar in size. A left anterior cervical node was 3 × 3 cm, erythematous, soft, and tender and a right posterior cervical node was 5 × 6 cm, firm, and nontender. Both were freely movable. No rash, conjunctivitis, pharyngitis, tonsillitis, or hepatosplenomegaly were noted.

Laboratory data on admission revealed a WBC count of 9,900/mm^3 with 36% segmented neutrophils, 4% band forms, 47% lymphocytes, 11% monocytes, 1% eosinophils, and 1% atypical lymphocytes. Hemoglobin was 11.4 g/dL and platelets 394,000/mm^3. Urinalysis and chest roentgenogram were normal.

Because noncompliance was considered as a cause of antibiotic failure, dicloxacillin was again administered on admission. However, after the diagnosis of tick-borne ulceroglandular tularemia was entertained the next day, oral tetracyline 30 mg/kg/day was started and dicloxacillin discontinued.

A 1:320 tube agglutination titer for *F tularensis* was obtained from serum collected on admission, the 24th day of illness. The admission blood culture proved to be sterile.

On the fourth hospital day, the erythrocyte sedimentation rate (ESR) was 53 mm/hr. Total bilirubin level was 0.2 mg/dL and alanine aminotransferase 20 U/L (normal <45). A heterophile antibody test was negative. Mantoux

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skin test was read as negative at 72 hours.

The patient remained afebrile, offered no complaints, and the size of his left cervical node decreased during the week-long hospitalization. A two-week course of tetracycline therapy was completed as an outpatient.

The patient's second *F tularensis* agglutinin titer six weeks after onset of illness and two weeks following the first remained at 1:320. Subsequent determinations 10 and 30 weeks after onset were 1:160 and 1:80, respectively.

Titers for the following agglutinins were negative in serum specimens drawn two weeks apart (the first specimen being drawn on the day of admission): *Brucella; Proteus* OX-19, OX-K, OX-2; *Salmonella* A, B, C, and D. The same specimens also revealed no evidence of infection in complement fixation tests for toxoplasmosis and cytomegalovirus.

On completion of tetracycline therapy, the patient's hemoglobin had risen to 13.4 g/dL and his ESR was 26 mm/hr. The ESR was 10 mm/hr one month later.

At a follow-up visit three weeks after discharge, the tick bite and occipital node were healed. At a visit three weeks later (ten weeks after onset), the left cervical node had spontaneously drained and was resolving. Over the next two weeks, the right cervical node, which had become erythematous and fluctuant, drained spontaneously and intermittently.

Four months after onset, there was no further drainage and all adenopathy was resolving. Three months later, slightly erythematous areas at the sites of the tick bite, occipital node, and two cervical nodes were the only signs of past disease.

DISCUSSION

Based on clinical manifestations, tularemia in humans is classified into six types: ulceroglandular, pulmonic, oculoglandular, oropharyngeal, glandular, and typhoidal.[3] The signs and symptoms of each type reflect the portal of entry of *F tularensis*.[3]

The ulceroglandular form, which our patient had, is characterized by persistent fever and chronic suppurative regional lymphadenitis draining the site of inoculation (vector bite, laceration subsequently exposed to infected tissue). Following an incubation period of one to 14 days, a papule appears at such a site prior to developing into a cutaneous ulcer.[3,4]

Ulceroglandular tularemia, the most common form of human tularemia, was seen in 87.5% and 52.8%, respectively, of two large general studies.[5,6] In a series of 48 pediatric patients with tularemia, 21 (44%) had the ulceroglandular type.[7] Physicians should be aware of exudative pharyngitis,[8] atypical pneumonia,[9] conjunctivitis,[10] and fever of unknown origin[11] as clinical manifestations of tularemia as well.

The predominant vector of *F tularensis* for humans in this country is dependent on the geographic region of exposure.[12] West of the Mississippi River the primary vectors are ticks and other blood-sucking insects. Excluding New England and the Middle Atlantic states, the cottontail rabbit is the most important vector east of the Mississippi River. These regional and vectorial differences result in different seasonal peaks of disease as well.[12] Rabbit-borne tularemia coincides with hunting in winter, while tick-borne disease peaks with increased exposure to these vectors during the summer months. Deerflies,[13] cats,[14] and muskrats[15] have also been noted to be important vectors in the United States.

Francis reported that in one half of patients with ulceroglandular tularemia-involved lymph nodes progress to suppuration and spontaneous drainage.[4] In the other half nodes may remain enlarged, firm, and tender for several months prior to gradual resolution.[4] Simple incision and drainage may be necessary when infected nodes become fluctuant, but Foshay warned against excision of nodes, believing that to be "more surgery than the condition warrants" and pointing out the potential complication of prolonged lymphedema.[5]

This author also emphasized the reliability of the tube agglutination test for tularemia, as well as the persistence of a positive titer following infection, up to 33 years.[5] *F tularensis* agglutinin titers usually appear during the second week of illness, increase in the third and fourth weeks, and peak between the fourth and eighth weeks of disease.[16]

In a clinically compatible illness, the Centers for Disease Control requires at least a four-fold change in agglutinating antibody titer between acute and convalescent serum specimens, with one being at least 1:160, for serologic confirmation of tularemia.[17] For a serologically presumptive case, one titer must be at least 1:160 without a four-fold change.[17] Specific serology is the primary diagnostic modality because optimal growth of *F tularensis* requires selective media containing cystine or cysteine.[3,10] However, routine attempts at isolation are not recommended since airborne transmission of the organism represents a significant health hazard to laboratory personnel.[3,10]

Streptomycin is the antimicrobial choice for treatment of tularemia, with tetracycline and chloramphenicol being alternative drugs.[3] Because our patient was afebrile and not acutely ill on admission, we believed the possible adverse auditory, vestibular, and renal effects of streptomycin and the potential bone marrow toxicity of chloramphenicol to be unacceptable in this clinical situation.[18] However, because he is less than eight years of age, our patient remains at risk for tooth discoloration secondary to tetracycline administration.[18]

Acknowledgment. The authors thank Walter T. Hughes, MD, for helpful suggestions and the Nassau County Department of Health in Hempstead, NY for performing the *Francisella* tularensis tube agglutination tests.

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Unusual contents in inguinal hernia sacs

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Should barium enema examinations be used as a screening device in patients over age 55 who have inguinal hernias? Some authors[1] point to an increased incidence of colorectal carcinoma associated with inguinal hernia. Others[2,3] dispute this association, stating that both colorectal carcinoma and inguinal hernias become more frequent with age and thus covary but are not causally related. In considering the feasibility of screening barium enemas, one should consider the contents of the hernia sac itself. Although unexpected abdominal structures may be present, the hernia sac itself may be the focus of pathologic processes. We present four cases of unusual hernia sac contents and pathologic conditions.

CASE REPORTS

Case 1. An 89-year-old woman with a history of aortic stenosis and Paget's disease had congestive heart failure, anemia, and guaiac-positive stools. On physical examination, a right inguinal hernia was noted. A barium enema revealed diverticulosis and a right inguinal hernia containing cecum and appendix (Fig 1).

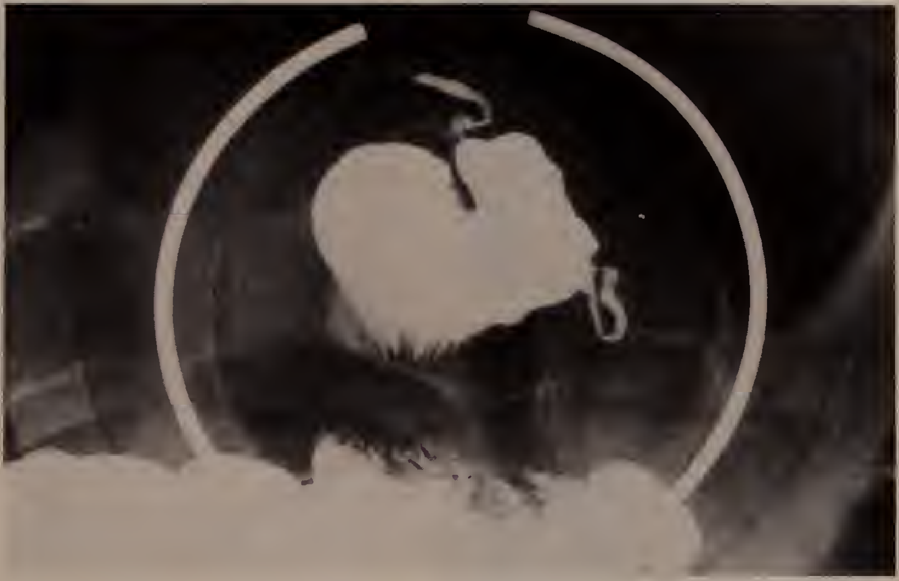

FIGURE 1. Case 1. Spot film from small bowel series showing cecum and appendix within right inguinal hernia sac.

Case 2. A 70-year-old man, previously in good health, had a three-month history of fatigue, weight loss, and guaiac-positive stool. On physical examination, a left inguinal hernia was noted. A barium enema revealed a left inguinal hernia which contained a loop of sigmoid colon (Fig 2). The efferent hernia loop was narrowed and contained overhanging edges with mucosal destruction. At surgery, an adenocarcinoma of the sigmoid colon was resected.

Case 3. A 65-year-old man with known hypernephroma metastatic to brain had guaiac-positive stools and anemia. Physical examination revealed a left inguinal hernia. A barium enema showed a left inguinal hernia containing sigmoid (Fig 3). Just distal to the insertion of the sigmoid colon into the hernia was an extrinsic defect that was thought to represent a serosal implant. At surgery, the patient was found to have hypernephroma metastatic to the sigmoid colon.

Case 4. A 66-year-old healthy man was evaluated for a huge right inguinal hernia. An upper gastrointestinal (GI) series revealed the hernia sac to contain the stomach, duodenum, small bowel, and colon (Figs 4,7).

DISCUSSION

All of the abdominal viscera have been found in various types of hernias. Omentum and small intestine are most commonly found in inguinal hernias. Less commonly found are sigmoid colon, bladder, ovaries, cecum, appendix, and stomach.

Case 1 illustrates the presence of cecum and appendix within the hernia sac. While not responsible for disease in this particular patient, this finding may have clinical significance. Mehta et al[4] report a case of cecal necrosis due to incarceration of the cecum secondary to the presence of a fecalith. The presence of the cecum within the hernia sac predisposed to fecal impaction resulting in incarceration and eventual pressure necrosis of the cecum, which was compressed between the fecalith and the fixed hernia sac.

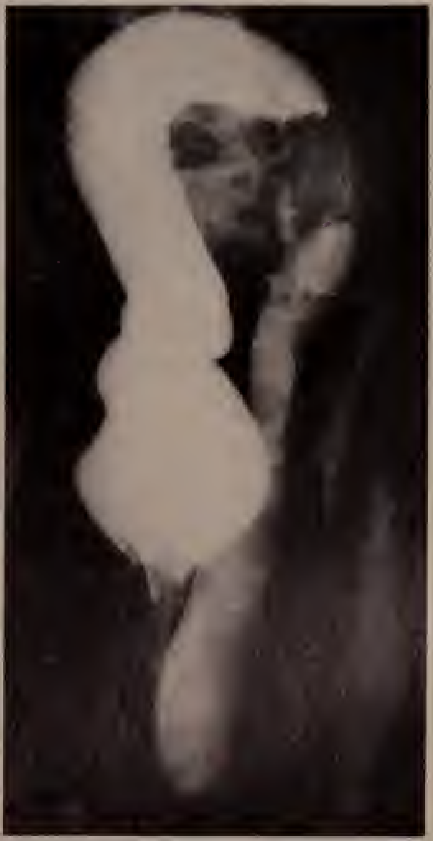

FIGURE 2. Case 2. Large left inguinal hernia containing loop of sigmoid with classic "apple-core" lesion.

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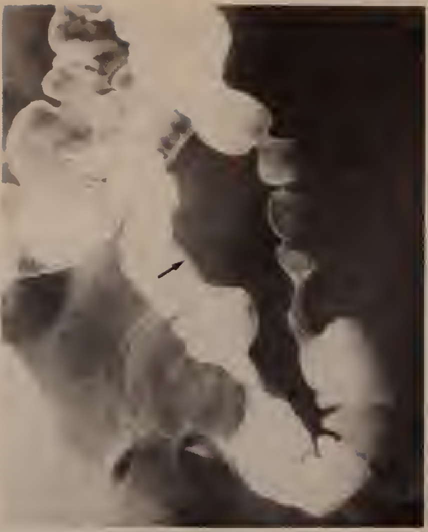

FIGURE 3. Case 3. Loop of sigmoid in left inguinal hernia with serosal implant from hypernephroma (arrow).

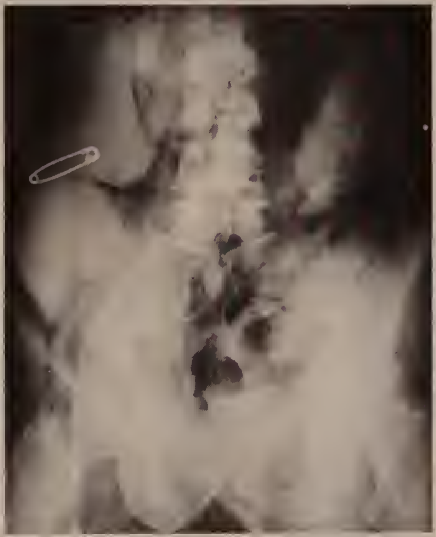

FIGURE 4. Case 4. Supine film of abdomen showing Cantor tube in right groin region. Note retroperitoneal air insufflated prior to surgery.

Case 4 illustrates the unusual occurrence of the stomach within an inguinal hernia. A similar case was reported by Nagendran.[5] His patient was a 62-year-old man admitted with a chief complaint of a scrotal hernia that increased in size after eating. The patient also experienced intermittent nausea and vomiting. An upper GI series revealed the stomach to be contained within the hernia. It was felt that the patient's symptoms were due to intermittent gastric obstruction.

In addition to unusual abdominal viscera contained within the hernia sacs, neoplastic processes may also be present. Tumors within hernia sacs are rare findings occurring in less than 0.5% of surgically excised sacs.[6] Primary tumors derive from peritoneum, spermatic cord, or a visceral organ contained within a hernial sac. Case 2 represents a primary hernia sac tumor. The first such reported case was in 1749.[7] Subsequently, Lejars[8] developed a classification system. Saccular tumors were those involving the hernia sac itself. The more common intrasaccular tumors were those representing a tumor contained within an organ in the sac. A review of the literature by Roslyn et al[9] disclosed 23 primary hernia sac tumors. Of these, seven were saccular and 16 intrasaccular (sigmoid colon, cecum, and urinary bladder).

Metastatic disease from a primary tumor not contained within the hernia sac is a more common finding. Carcinoma of the colon is the most common primary tumor associated with metastases. However, cancer of the bile ducts, prostate, ovary, and pancreas have also been described.[10] Metastatic disease from primary lesions of the tonsils, pericardium, stomach, and melanoma have also been reported.[6] Case 3 is an example of renal cell carcinoma metastatic to a hernia sac. While metastases of renal cell carcinoma to colon occur, to our knowledge this is the first case of metastasis to the colon within a hernia sac.

Whether or not intraperitoneal metastases are present before the occurrence of the hernia is uncertain. The means by which the metastases spread is also open to debate. Roslyn et al[9] postulate that intraperitoneal spread may be due to local phenomena such as associated inflammation and that gravity may be a significant factor in a manner similar to drop metastases.

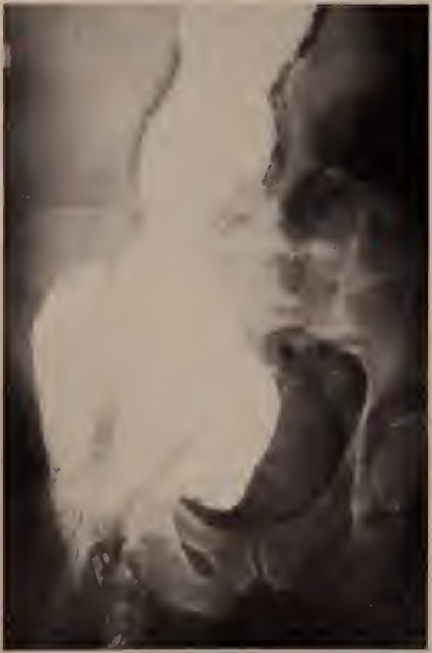

FIGURE 5. Case 4. Stomach and duodenum within right inguinal hernia.

Fieber and Wolstenholme[11] discuss the significance of incarceration as a feature of both primary and metastatic tumors in hernia sacs. A small tumor contained within a hernia sac may prevent reduction of the hernia due to subsequent growth, inflammation, or adherence. Therefore, the development of incarceration of a long-standing hernia suggests the possibility of coexisting neoplasm.

While the efficacy of screening barium enema examinations in finding associated colorectal carcinoma in patients with inguinal hernias is still uncertain, the barium enema and, in some cases, upper GI series, can provide valuable information about the contents of the hernia sac itself. It is useful to know the anatomic contents of the sac before any abdominal surgery. In addition, as demonstrated, the hernia sac may itself contain diseased tissue. Although unusual contents in hernia sacs are rare, they do occur. Prospective studies regarding the efficacy of screening barium enemas would be of benefit.

Acknowledgment. The authors thank Charles W. Merten, MD, North Shore University Hospital, for supplying the illustrations for Case 4, and Robin Stein for technical assistance in preparing this manuscript.

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Disopyramide-induced profound hypoglycemia

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Disopyramide (Norpace), is a recently introduced antiarrhythmic agent which has actions similar to those of quinidine,[1] although it is structurally distinct. Since its introduction as a therapeutic agent, several side effects have been reported.[2-4] The most worrisome of these is depression of myocardial contractility leading to precipitation or exacerbation of congestive heart failure.[2,3,5-7] Severe asymptomatic hypoglycemia has been reported in three patients who had no other clinical or laboratory disturbances.[8,9]

We report here on two patients who suffered profound symptomatic hypoglycemia along with other clinical and laboratory disturbances, all of which we believe to be due to the use of disopyramide.

CASE REPORTS

Case 1. A 50-year-old woman with a history of congestive heart failure secondary to hypertension was hospitalized for complaints of worsening dyspnea, orthopnea, and edema. Her physical examination on admission was remarkable for scleral icterus, jugular venous distention, left basilar rales, S3 gallop, 10-cm span of liver, and pedal edema. Laboratory results disclosed the following values: BUN, 27 mg/dL; creatinine, 1.4 mg/dL; glucose, 198 mg/dL; total bilirubin, 4.6 mg/dL; SGOT, 39 IU/dL; and alkaline phosphatase, 145 IU/dL. The patient was treated with digoxin, diuretics, and penicillin for pneumonia. She responded to therapy with improvement of both pneumonia and congestive heart failure. Five days after admission quinidine sulfate therapy was initiated for premature ventricular beats, but was changed to disopyramide, 100 mg orally every eight hours, on day 6 because of persistent gastrointestinal complaints. The patient made good clinical improvement and was transferred from intensive care. On day 10 she developed acute dyspnea, edema, and lethargy. Laboratory studies at this time revealed these values: glucose, 23 mg/dL; creatinine, 2.6 mg/dL; BUN, 37 mg/dL; SGOT over 300 IU/dL, LDH over 600 mg/dL, alkaline phosphatase, 198 IU/dL, creatinine phosphokinase, 78 mg/dL. The EKG was unchanged from before. Her heart failure required nitroprusside for control. The disopyramide was not discontinued. Her liver functions continued to deteriorate until her death on day 15. Serum insulin drawn during one of the hypoglycemic episodes was 6 MIU. Despite continuous intravenous glucose administration, hypoglycemia persisted. Postmortem examination showed cardiomegaly, pulmonary congestion, and chronic passive congestion with centrolobular necrosis consistent with ischemic hepatitis.

Case 2. A 71-year-old man with a history of congestive heart failure secondary to hypertension was hospitalized with increasing dyspnea, edema, and ascites. Medications on admission included digoxin, furosemide, alpha methyldopa, and prazosin. His past renal and hepatic functions had been normal. Physical examination on admission showed jugular venous distension, bilateral lung rales, S3 gallop, ascites, a 14-cm liver span by percussion, and pedal edema. Laboratory results gave the following values: a BUN, 36 mg/dL; creatinine, 1.4 mg/dL; SGOT, 20 IU/dL; alkaline phosphatase, 291 IU/dL; and glucose, 120 mg/dL. The patient was treated with salt and fluid restriction, diuretics, and digoxin. He responded well with an 11-lb weight loss and improvement of symptoms in nine days. On day 15, he was noted to have multiple premature ventricular beats. Disopyramide therapy with 150 mg orally every six hours was started. Improvement in arrhythmia was noted. Five days later, the patient was noted to be lethargic and to have more edema and ascites than earlier. Laboratory results at this time revealed: glucose, 24 mg/dL; BUN, 77 mg/dL; creatinine, 2.2 mg/dL; SGOT, 258 IU/dL; alkaline phosphatase, 275 IU/dL; total bilirubin, 6.6 mg/dL. He was given intravenous glucose and furosemide and had the disopyramide discontinued. Good clinical improvement resulted in 24 hours. His laboratory values were all back to baseline normal values at the time of discharge. A liver biopsy was performed on day 25 to evaluate liver functional abnormalities which showed a normal histology. Serum insulin levels drawn during the period of hypoglycemia and later with euglycemia were 9 MIU and 12 MIU, respectively. Results of fasting blood glucose and a six-hour glucose tolerance test done after discontinuation of disopyramide therapy were both within normal limits.

DISCUSSION

There have been three other published reports of patients with hypoglycemia alleged to be secondary to disopyramide.[8,9] None of these patients had simultaneous cardiac failure. There are fewer than 20 other unpublished reports of patients on disopyramide having had hypoglycemia (personal communication, Searle Laboratories). Most of these patients had other factors involved which could have contributed to this problem. Disopyramide is known to precipitate congestive cardiac failure and cause occasional mild liver functional abnormalities.[10] Hypoglycemia or transaminase abnormalities usually become obvious within 24 hours of initiating disopyramide therapy.[8-10]

Both our patients had previous histories of congestive heart failure. They improved from their initial status, and appeared to have sudden exacerbations of cardiac, renal, and hepatic insufficiency associated with hypoglycemia four to five days after beginning disopyramide therapy. The patient in whom disopyramide was discontinued improved, while the other patient had persistent cardiac failure and hypoglycemia.

Investigation seeking the etiology of this hypoglycemia by us and others[8,9] revealed appropriate levels of serum insulin, glucagon, stimulated plasma cortisol, and growth hormone, as well as normal glucose tolerance test results. None of the other reported cases of hypoglycemia had liver function abnormalities.[8,9] The two patients who had

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liver function abnormalities and cardiac failure had no problem with hypoglycemia.[10] A biopsy done in one of these patients showed the pathologic condition similar to that of our Case 1.[10] Despite the short period of time between therapy and side effects with disopyramide, no one has found any evidence for an allergic mechanism, and all cases have had a history of congestive heart failure.

We believe that the disopyramide therapy caused in renal, cardiac, and hepatic problems in these two patients, as well as the symptomatic hypoglycemia. The question as to whether the hypoglycemia was due directly to the drug or was caused by the cardiac failure remains unanswered. We believe that ischemia, as a result of depressed cardiac function was the etiology of the liver functional abnormality, as well as the renal insufficiency and the hypoglycemia. Acute cardiac failure from disopyramide can occur very rapidly.[7] Ischemic hepatitis is a well-known complication of severe congestive heart failure,[11,12] and can lead to extensive hepatic cell necrosis with resultant hypoglycemia.[13] Our Case 1 had the hepatic histology of ischemic necrosis, while Case 2 had a normal hepatic histology. The liver biopsy was delayed in the second case, and ischemic hepatitis at the time of hypoglycemia cannot be ruled out. There is no reason to believe that the patients had toxic levels of disopyramide, since they were on a lower than maximal dose; they had normal renal and hepatic functions to start with.

We feel that physicians should be aware of the rlationship between disopyramide and hypoglycemia, both with and without symptoms, as well as the drug's relationship with cardiac, renal, and hepatic insufficiency, since these appear to be reversible problems in these otherwise critically ill patients.

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Metabolic alkalosis following relief of urinary tract obstruction

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Abnormalities of renal function are common following the relief of urinary tract obstruction.[1] Although disturbances of renal sodium and water handling have been studied most extensively, disordered acidification may also occur. This defect in acidification has been localized to the distal nephron[2] and indeed obstructive uropathy must be considered in the differential diagnosis of distal renal tubular acidosis.[3] It is therefore not surprising that metabolic alkalosis has not been mentioned as potentially accompanying the postobstructive state. We describe a case which is, to our knowledge, the first report of metabolic alkalosis developing after relief of urinary tract obstruction. Furthermore, we emphasize the rapidity with which this may occur and the need to monitor all aspects of acid-base balance during postobstructive diuresis.

CASE REPORT

A 76-year-old man with long-standing chronic obstructive pulmonary disease developed urinary frequency, nocturia, hesitancy, and decreased force of the urinary stream. He also noted gradually increasing shortness of breath, increasing abdominal girth, and ankle edema. He consulted his local physician who prescribed an antibiotic for a presumed urinary tract infection; there was no improvement. On the day of admission his urine output stopped completely. His medications included theophylline, hydrochlorothiazide, carbenicillin, and pyridium.

On examination in the emergency room, he was described as lethargic and oriented only to person. He was obese, weighing 121 kg. His blood pressure was 170/90, respirations were 36 and labored, pulse was 100 and regular, and he was afebrile. He had diminished heart tones, decreased breath sounds with bilateral rales, questionable ascites, and 3+ pretibial edema. His prostate gland was markedly enlarged.

Initial laboratory data revealed: creatinine 10.2 mg/dL; BUN 174 mg/dL; sodium 125 mEq/L; potassium 5.2 mEq/L; chloride 80 mEq/L; total CO_2 23 mmol/L; calcium 8.9 mg/dL; phos-

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phorus 7.5 mg/dL. Arterial blood gases obtained on room air revealed: pH 7.37; pCO_2 45 mm Hg; bicarbonate 25 mEq/L; pO_2 55 mm Hg. The central venous pressure was 10 cm H_2O. Chest x-ray film showed cardiomegaly and pulmonary congestion, and the EKG showed sinus tachycardia with premature atrial contractions, left bundle branch block, but no left ventricular hypertrophy. A sonogram of the kidneys showed bilateral hydronephrosis. A diagnosis of prostatic hypertrophy with bladder outlet obstruction was made.

A Foley catheter was inserted and over the next 24 hours approximately 13 L of urine were drained. Fluid replacement totaled 100 mL of 5% dextrose in water and 475 mL of 0.9% sodium chloride containing 12 mmol of potassium chloride. With diuresis the BUN, serum creatinine, serum potassium, and the central venous pressure declined. At the same time there was a rapid rise in the serum sodium and the serum bicarbonate levels. The bicarbonate level rose to 39 mEq/L 24 hours following admission. There was no nasogastric suction or vomiting, and diuretics were not used; he was not given any source of alkali. The diuresis was also accompanied by a marked increase in the pCO_2, which reached 66 mm Hg. These data are summarized in the Table.

Serial Laboratory Data

	HOURS AFTER ADMISSION					
	0	**2½**	**9**	**12**	**20**	**24**
pH	...	7.37	...	7.43	7.35	7.39
pCO_2, mm Hg	...	45	...	46	60	66
TCO_2, mmol/L	23	27	30	31	34	41
HCO_3, mEq/L	...	25	...	30	33	39
pO_2, mm Hg	...	55	...	45	77	54
Sodium, mEq/L	125	...	138	...	147	...
Potassium, mEq/L	5.2	...	3.5	...	3.1	...
Creatinine, mg/dL	10.2	...	...	...	2.4	...
BUN, mg/dL	174	...	136	...	92	...
Anion gap	22	...	11	...	15	...

He was treated with bronchodilators and his pCO_2 decreased somewhat despite the elevated bicarbonate. With continued respiratory therapy and correction of the metabolic alkalosis, the pCO_2 fell to 35 mm Hg one week after admission. At that time his mental status was improved and his creatinine level was 1.0 mg/dL.

DISCUSSION

Metabolic alkalosis, defined as a primary process which acts to elevate the serum bicarbonate concentration, is usually generated by a negative external hydrogen ion balance.[4] It has also been proposed that metabolic alkalosis may develop independently of changes in external hydrogen ion balance. For instance, in contraction alkalosis, reduction of the extracellular fluid volume via loss of bicarbonate-free fluid may lead to an increase in the bicarbonate concentration in the extracellular space. Which of these factors were responsible for the rapid generation of severe metabolic alkalosis in the present case?

Unfortunately, this question cannot be definitively answered because studies of renal acidification were not performed. However, examination of the available data allows us to reach certain conclusions. The serum bicarbonate level was normal on admission despite the renal failure and elevated anion gap. In view of the normal pH, this indicates a combined metabolic acidosis and metabolic alkalosis.[5] Thus, even before relief of the urinary tract obstruction there was some process tending to raise the serum bicarbonate. This could have been the result of the diuretics he was taking. In addition, it is possible that he had retained CO_2 secondary to his lung disease resulting in renal bicarbonate generation. However, these factors could not have been of primary importance after admission because his diuretics had been discontinued and his admission pCO_2 was normal. Furthermore, although the pCO_2 did increase, the bicarbonate concentration increased before the rise in the pCO_2 ruling out an elevation in pCO_2 as a primary stimulus to increased renal acid excretion. Carbenicillin has been associated with metabolic alkalosis, but only in doses substantially larger than that taken by this patient (382 mg, four times daily for 7 days).[6] This too was stopped on admission. Therefore, the rapid rise in the serum bicarbonate was most likely due to a process developing after admission.

There was no exogenous administration of base, nor was there extrarenal loss of nonvolatile acid. Therefore, if changes in the external hydrogen ion balance were solely responsible for the marked and rapid rise in the serum bicarbonate, tremendous renal acid excretion (approximately 550 mEq) would have been required. However, as has already been mentioned, in the postobstructive state maximal acid excretion may be impaired. While admittedly inaccurate, the urinary pH by dipstik was 6 on two occasions, obviously less than maximally acid. Thus, increased acid excretion cannot be the sole explanation for the metabolic alkalosis. Nevertheless, with a urine pH in this range, renal acid excretion undoubtedly contributed to the rise in the serum bicarbonate. Indeed, a case of postobstructive diuresis was described in which the patient, initially acidotic, excreted appropriate quantities of acid and raised his serum bicarbonate concentration toward normal.[7]

It is conceivable that metabolic conversion of ketone bodies or lactate could have contributed to the rise in the serum bicarbonate concentration. Although this possibility cannot be excluded, certain factors make it unlikely. First, there were no ketone bodies in the urine. Second, lactate accumulation is unusual in chronic obstructive pulmonary disease,[8] and this patient showed no clinical evidence of hypoperfusion. Finally, there was no correlation between the rise in the serum bicarbonate concentration and changes in the anion gap.

Another factor to consider is potassium balance. It has been demonstrated that potassium depletion can elevate the serum bicarbonate concentration via a shift of hydrogen ions from the extracellular to the intracellular space in exchange for potassium.[9] Although we do not have data regarding potassium excretion, it is likely that substantial urinary potassium losses occurred. Increased urinary potassium excretion has been demonstrated during the diuresis that follows relief of bilateral ureteral obstruction.[10] Thus, potassium depletion may have contributed to the rise in the serum bicarbonate observed in this patient.

The final factor to be considered is contraction alkalosis. The significance of contraction of the extracellular space as a generator of metabolic alkalosis has been questioned.[11] In the intact organism, any tendency toward change in the extracellular bicarbonate concentration is greatly dampened by the participation of intracellular and bone buffers. Thus, when the extracellular volume is acutely contracted, any tendency for the bicarbonate concentration to rise would be offset by a movement of intracellular hydrogen ion into the extracellular space. However, significant contraction alkalosis has been demonstrated during massive diuresis in patients with congestive heart failure.[12] Presumably the rate and degree of contraction were so large that, despite intracellular buffering, the serum bicarbonate concentration rose significantly.

Massive losses of extracellular volume may also occur following relief of urinary tract obstruction[13] and could predispose to the development of contraction alkalosis. The patient described here did develop metabolic alkalosis coincident with a massive diuresis. We may assume this obese patient had an extracellular volume of 20 L. In view of the marked rise in the serum sodium concentration, large losses of hypotonic urine may be inferred. His total extracellular fluid loss can be estimated to be about 7.5 L. Assuming an initial total extracellular bicarbonate content of 440 mEq (22 mEq/L × 20 L), and assuming the losses to be bicarbonate-free, the predicted new serum bicarbonate concentration, in the absence of intracellular buffering, would be 35 mEq/L. This is close to the value actually observed. It therefore is likely that contraction played a significant role in the observed rapid rise of the serum bicarbonate concentration. However, to the extent that intracellular buffering took place, and realizing that the urine may not have been bicarbonate-free, contraction cannot account fully for the alkalosis. Thus, it is reasonable to conclude that in addition to contraction of the extracellular space, renal acid excretion and potassium depletion contributed to the observed rise in the serum bicarbonate level.

Why is it that despite the not infrequent occurrence of postobstructive diuresis, metabolic alkalosis has not been commented upon previously? It is generally recommended that the urine output be replaced quantitatively, allowing for the gradual development of a negative fluid balance, watching carefully for signs of hypovolemia.[14] It is obvious that such an approach would eliminate any rapid, extreme contraction of the extracellular space and any tendency to develop contraction alkalosis.

Also important in this case is the severe hypercarbia which occurred during the development of the metabolic alkalosis. It is likely that the metabolic alkalosis was significant in its genesis since the rise in bicarbonate preceded the rise in pCO_2. Such profound respiratory "compensation" to metabolic alkalosis has been described.[15] In the setting of chronic obstructive pulmonary disease this may occur even when metabolic alkalosis develops acutely and in the absence of alkalemia.[16] This observation extends the lesson to be learned from this case. That is, in patients undergoing postobstructive diuresis, a variety of acid-base disturbances may occur, particularly in the presence of underlying chronic obstructive pulmonary disease.

Acknowledgment. The authors would like to thank Donald E. Kamm, MD, for his constructive criticism of the manuscript. We also thank Kathie Friend and Diana Saladzius for their excellent secretarial assistance.

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Severe systemic reactions following administration of different ureotonic drugs

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The three types of uterotonic drugs in current use—oxytocin, the ergot alkaloids, and the prostaglandins—are all associated with side effects on major organ systems. Their combined or sequential administration may lead to systemic reactions of hazardous degree, as illustrated by the following case report.

Case Report

A healthy normotensive 18-year-old para 0-0-0-0 at term was scheduled for cesarean section because of fetal distress (recurrent late decelerations) at 5-cm dilation of the cervix. Following an intravenous preload with lactated Ringer's solution, lumbar extradural block was instituted with 20 ml of 3% 2-chloroprocaine (Nesacaine), and satisfactory analgesia to a sensory level of T-4 re-

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sulted. Vital signs remained unchanged (BP 130/80 mm Hg, pulse 84-96). Twenty minutes after the transverse skin incision, a vigorous baby was delivered (Apgar scores 8 and 9 at one and five minutes, respectively). Following separation of the placenta, oxytocin (Pitocin), 20 units, was added to the intravenous infusion. However, the uterus did not contract satisfactorily, and increasing hemorrhage was noted. Five minutes after the start of the oxytocin infusion, 40 more units were added, and the speed of infusion was greatly increased. Approximately four minutes later, methylergonovine (Methergine), 0.2 mg, was injected as a bolus intravenously, followed after three minutes by the same dose into the myometrium. The patient began to complain of nausea and was given droperidol (Inapsine), 2.5 mg, intravenously. Since bleeding continued to be brisk, prostaglandin F_2 = alpha (Prostin), 15 mg, was injected into the myometrium. Within one minute, the patient became pale and diaphoretic, vomited, and developed severe shortness of breath with audible expiratory wheezes. Her blood pressure, previously 140/80 mm Hg, was now 240/90 mm Hg with a pulse rate of 80. She was treated with oxygen by mask and with hydralazine (Apresoline), 5 mg, intravenously. The dyspnea resolved within three minutes, and the blood pressure decreased gradually. Ten minutes after the hydralazine injection, the pressure was again at 140/80 mm Hg. The remainder of the operation was uneventful. Total blood loss was estimated at 1,100 mL.

DISCUSSION

In order of appearance, our patient developed vomiting, diaphoresis, hypertension, and bronchoconstriction associated with the intravenous and/or myometrial administration of oxytocin, methylergonovine, and prostaglandin F_2-alpha within a 10-minute interval. Substances injected into the myometrium of the vessel-rich, term-pregnant uterus are rapidly absorbed into the circulation. All three of the administered drugs have vascular effects. Oxytocin, in low dosage, causes marked but transient vasodilation, leading to a fall in pressure—both systolic, and especially, diastolic. However, when high doses (>20 mU/min) are infused continuously, as in this case, the fall in arterial pressure is brief and is followed by a small but sustained rise.[1,2] Methylergonovine, the second drug used, is a semisynthetic ergot alkaloid of the amine group and, as such, has partial agonistic or antagonistic effects on adrenergic, dopaminergic, and tryptaminergic receptors. Characteristically, methylergonovine induces peripheral vasoconstriction with hypertension and may cause diaphoresis, dizziness, chest pain, and dyspnea, as well as nausea and vomiting. The half-time of its disappearance from plasma is about two hours.[1,2] Finally, prostaglandins of the F series tend to cause vasoconstriction, with subsequent elevation of blood pressure. They also induce stimulation of the smooth muscles of the alimentary tract inducing nausea, vomiting, and diarrhea. Intense bronchospasm, simulating an acute asthmatic attack, may also be initiated. Plasma half-life has been estimated to be less than one minute.[3-5]

Sudden severe hypertension is fraught with the possibility of cerebral hemorrhage. Thirteen cases of postpartum cerebrovascular accident in previously healthy, normotensive women secondary to acute and marked rises in blood pressure have been reported.[6] These patients had received a vasopressor drug in conjunction with spinal or extradural analgesia. Following parturition, an ergot preparation was given, alone or with oxytocin, and within five minutes, systolic pressure rose to above 200 mm Hg. Only six of the women survived without neurologic sequelae. Sudden severe dyspnea is equally hazardous. Because of metabolic changes, hypoxemia develops more rapidly in pregnancy than in the nonpregnant state.[7] In addition, by reducing the oxygen-carrying capacity of the blood, hemorrhage decreases oxygen delivery to the tissues. Finally, vomiting can always lead to pulmonary aspiration of gastric contents, even in conscious surgical patients if movement of the upper torso is hampered by the operative intervention or position on the operating table.

DISCUSSION

We have presented the course of a healthy parturient patient, who, in addition to minor side effects, developed marked hypertension, considerable nausea, and severe dyspnea following the administration of oxytocin, methylergonovine, and prostaglandin F_2-alpha within a span of ten minutes. The hypertension may have been due to the combined actions of all three drugs, while nausea and dyspnea may have been attributable to both the ergot preparation and the prostaglandin. Before multiple drugs with similar side effects are administered within a short period, their additive properties and lag times to peak activity must be taken into consideration. Furthermore, uterine fundal massage should precede administration of a second or third uterotonic drug.

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TULAREMIA AND REPORT OF A CASE

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Case—R. B., age 35 years, occupation Steward of a Club. His duties required him to dress meats and prepare meals. I was called to attend him on Dec. 6, 1927. He was suffering from abdominal pains, spasmodic in character, pains in the back and muscles of his arms, vomiting, diarrhea, bloody stools and prostration. The abdomen was generally tender and distended. There was no sign of rigidity. His temperature was 101.5, pulse 90 and respirations 20. He was taken ill two days previous with chills, headache and general malaise. Further examination revealed a small area of inflammation over the distal phalangeal joint of the mid-finger of his right hand. This he attributed to a scratch received while dressing rabbits a week previous when his finger rubbed against a sharp rib bone. This area was dressed and bandaged.

The abdominal symptoms subsided after three days and his temperature dropped to 99. Pulse was 70 and respirations 18. He began to complain of intense pain in his right arm especially marked in the axilla, elbow and upper arm. Palpation in the axilla and about the elbow and muscles of the upper arm revealed tenderness without a marked swelling. There was at this time a faint red line extending on the anterior and outer surface of the forearm from the wrist to the elbow region. The muscles of the forearm, upper arm and in the pectoral region were extremely sensitive to pressure. The area previously noted on his right mid finger showed signs of suppuration was opened, a small drop of pus exuding.

The pain in his arm persisted despite local and general palliative measures and on Dec. 13 he was removed to the hospital. From Dec. 14 to Dec. 21st, 1927, he was given small increasing doses of Streptoccoccic Immunigun serum subcutaneously. The pain and tenderness in his axillary region subsided but there appeared a marked swelling in the region of the epitrochlear node. This area showed signs of fluctuation and the overlying skin was reddened. On Dec. 24th, it was incised and about half ounce of sero-purulent fluid exuded. Iodoform gauze drain was inserted into the incision and he was allowed to leave the hospital. For a week thereafter he was practically free from pain.

On the 2nd of January, 1928, the incised gland still draining a sero purulent fluid intermixed with small particles of a caseous debris, he complained again of pain in his right axilla and neck. Examination of the axilla showed a marked fullness, induration and extreme tenderness to touch. The upper arm was tender to pressure. His temperature, pulse and respiration were found to be normal and aside from pain in his arm no other symptoms were noted. The area involved on the finger had healed.

One week later a mass about the size of a small orange was felt in the axilla with the arm in hyperextension. This was indurated and tender. He complained of pain in the subpectoral region and lateral cervical region. The incised epitrochlear node by now was practically healed, drainage ceasing. His temperature, pulse and respirations were normal. After 10 days the mass in his axilla began to show signs of suppuration and on January 30th was incised under general anesthesia and about 2 oz. of a thin sero-purulent fluid, amber in color together with small masses of a caseous debris drained. The temperature, pulse and respiratory reports while in the hospital and subsequently showed nothing of interest or abnormality. His leucocyte count ranged from 8,000 to 11,500. The blood Wasserman was persistently negative. At no time was there evidence of liver or spleen enlargements. (A sample of blood serum sent to the U. S. Public Health Laboratories, at Washington, D. C., on January 24, 1928, was reported as agglutinating Bacterium Tularense in all dilutions from 1:10 to 1:1280.)

At the present time he is up and about free from pain. The incision in his axilla is still draining. He has lost twenty pounds in weight during his illness.

—*NY State J Med* 1928; 28:645

TULAREMIA

The causative agent of tularemia, *Pasturella* (*Francisella*) *tularensis*, was first identified by McCoy and Chapin of the US Public Health Service while studying ground squirrels with a plague-like illness in Tulare County, California. The first case in a human with bacteriologic proof was published by Wherry and Lamb in 1914. Edward Francis of the US Public Health Service was largely responsible for elucidating the epidemiologic, clinical, and ecologic characteristics of the disease through research conducted over many years.

The first recognized case of tularemia in New York State occurred in 1927. A detailed report of this case was published in the *Journal* in 1928 by Jerome A. Murphy, MD of Buffalo, New York. This report, which is republished here, demonstrates a number of important epidemiologic and clinical characteristics of the disease. It also indicates that some modalities of therapy, specifically incision and drainage of fluctuant buboes, are still valid, while others are not. And it clearly shows how difficult the management of such cases was in the pre-antibiotic era.

PASCAL JAMES IMPERATO, MD
Deputy Editor

In August, following the close of the 206th annual session of the New York Legislature, New York Governor Mario Cuomo signed several bills that relate to health care and medical practice.

Mental health care of minors

Parental consent will no longer be required before mental health services are provided to minors in cases where the services are necessary to the child's well-being and when the requiring of parental consent would be detrimental to the child's welfare.

Governor Cuomo also appointed a 16-member Select Commission on the Future of the State-Local Mental Health System. Jerome Goldsmith, executive vice president of the Jewish Board of Children and Family Services, is the chairman of the new commission. The commission is charged with recommending improvements in local and state mental health programs and developing short-term recommendations to ease overcrowding in city and State psychiatric inpatient facilities in New York City.

Another new law allows people suffering from mental illness who are admitted to family care homes to receive state-funded public assistance and Medicaid benefits without first having to be admitted to a State mental health institution.

Autopsies and religious beliefs

Autopsies will be prohibited when they are contrary to the deceased person's religious beliefs, and when there is no urgent public necessity for the procedure. The law does not prevent autopsies as part of a homicide investigation, or as a means to combat a threat to public health. The law will better enable observance of Jewish law, which requires burial within 24 hours.

Mandatory care for critically ill

Doctors, nurses, other health care personnel, and even guards, can now be fined $1,000 or sentenced to a year in jail for denying emergency room treatment to critically ill patients in New York City. Diversion of a patient to another hospital can now be sought only when admitting the patient may endanger his life or the life of others. The law permits hospitals to request that ambulance drivers divert patients to other hospitals when the hospital requesting the diversion does not have appropriate medical equipment, personnel or space. The request must be made by phone to the Emergency Medical Service or 911 ambulance service several times during the day in order to ensure that each shift of drivers is informed of the diversion status. However, the bill requires that the hospital treat any patient who may arrive at the emergency room despite the official diversion status.

The law was written in response to the complaints of ambulance drivers to councilman Peter F. Vallone of Astoria, Queens. Mr. Vallone informed Assemblyman Alan G. Hevesi, also of Queens, who investigated the practice. The issue of hospital diversion was dramatized by the deaths last December and July of two patients who had been refused treatment at city hospital emergency rooms and were transferred to other hospitals.

Health insurance for treatment of alcohol problems

A law that goes into effect in September, 1984, will require insurance companies to reimburse alcohol-dependent subscribers who choose to have the coverage for at least 60 days of out-patient treatment. In addition, family members will be covered for 20 days of counseling and therapy.

Safer boxing?

In response to the death of South Korean boxer Duk Koo Kim during a Las Vegas boxing match last November, New York State gave its boxing laws the biggest overhauling of the past 60 years. The major health aspects of the law include mandatory suspension of a boxer's license for 90 days after a knockout, and for 45 days after a technical knockout if there is evidence of head injury, medical exams after a knockout, or when there is evidence of head injury; and a ban, except in some championship bouts, on the use of thumbed gloves, which have been blamed for many eye injuries.

Guidelines for authors

ORIGINALITY

The *New York State Journal of Medicine* welcomes research papers and original essays on the practice of medicine, medical education, public health, the history of medicine, medicolegal matters, legislation, ethics, the mass media, and socioeconomic issues in health care.

Manuscripts should be prepared according to the "Uniform requirements for manuscripts submitted to biomedical journals," published on page 1065. The requirements were established by the International Committee of Medical Journal Editors, of which the *Journal* is a participating member. These Guidelines are intended to highlight aspects of the *Journal*'s particular style of publication.

A manuscript will be considered for publication if it is original, has not been published previously in whole or in part in either a medical journal or a lay publication, and is not simultaneously under consideration elsewhere. A copy of any possibly duplicative material, such as a reference "in press," should be submitted along with the manuscript.

PREPARATION

An original typewritten or "word-processed" manuscript and two photocopies (to facilitate outside review) are required. If the manuscript is not accepted for publication, the original and one copy will be returned. All figures must be submitted in triplicate. The manuscript should be double-spaced throughout, including references, tables, legends, quotations, and acknowledgments. A separate title page should include the full title of the paper in upper and lower case type, the names of the authors exactly as they should appear in print (including their highest academic degree), an abbreviated title of no greater than 40 spaces for use as a running foot, and the names of all providers of funding for research on which the paper is based. Information on the amount and allocation of funding is optional.

A corresponding author should be designated in the covering letter. Authors should list their title and affiliation at the time they did the work, and, if different, their present affiliation. The addresses and telephone numbers of all authors should be supplied for editorial purposes. All authors of a manuscript are responsible for having read and approved it for submission.

CATEGORIES

Research Papers should be limited to 2,500 words and should include the following sections: Introduction, Methods, Discussion, and References. Multiple subheadings and numbered lists are discouraged. An abstract limited to 150 words should state the reasons for the study, the main findings, and their implications. Statistical evaluations should be described in the Methods section, and the name and affiliation of the statistician should be included in the acknowledgments if this individual is not listed as a coauthor. Reports of experiments involving human subjects must include a description in the Methods section of the informed consent obtained and a statement that the procedures followed were approved by an institutional research review committee. Anonymity of patients must be preserved. Reports of experiments on animals must note which guidelines were followed for the care and use of laboratory animals.

Preference will be given to Case Reports limited to 1,250 words. Review Articles should not exceed 3,000 words. Commentaries should be between 750 and 1,000 words. Other kinds of original essays should not exceed 2,000 words. A letter of inquiry should be sent to the editor prior to submitting a Review Article or Commentary.

For Research Papers only, scientific measurements should be given in conventional units, with Système Internationale (SI) units in parentheses. Abbreviations and acronyms should be kept to a minimum, and jargon should be avoided. Generic names of drugs should be used instead of brand names.

FIGURES

The submission of color illustrations or slides is discouraged. Only black and white glossy photographic prints or "camera-ready" artwork will be accepted. The *Journal* is unable to provide art services such as the addition of arrows to photographs. A signed consent for publication must accompany photographs in which the patient is identifiable. Illustrations from other publications generally will not be considered. Legends for illustrations should be typed on a separate sheet, and for photomicrographs should include magnification and stain. Each illustration should be lightly marked on the back in pencil with the name of the first author, the number as cited in the text, and an arrow indicating the top. Each set of illustrations should be submitted unmounted in a separate envelope.

Tables should be simple, self-explanatory, and few in number. Each table should be typed double-spaced on a separate sheet.

REFERENCES

References should be limited to the most pertinent. The recommended maximum number of references is 25 for Research Papers and most other original contributions (except lengthier Review Articles), 12 for Commentaries and Case Reports, and 6 for letters to the editor.

Authors are responsible for the accurate citation of references. Citation of secondary sources is discouraged except where the original reference is unobtainable. Authors may not cite references they have not read, and the use of abstracts as references should be avoided.

References should be indicated in the text by superscript numbers following the name of the author (eg, Smith^2 reported two cases).

The list of references at the end of the article should be typed double-spaced and references should be numbered in the order in which they appear on the text. When there are six or fewer authors, all should be listed; where there are seven or more, the first three should be listed, followed by *et al.* Names of journals should be abbreviated according to *Index Medicus* and underlined.

Sample references:

1. Kepes ER, Raj S, Thomas P, Vemulapalli K. Methadone and intravenous morphine requirements. *NY State J Med* 1983; 83: 925-927.
2. McGuigan JE. Peptic ulcer. In: Petersdorf RG, Adams RD, Braunwald E, Isselbacher KJ, Martin JB, Wilson JD, eds. *Harrison's Principles of Internal Medicine.* New York, McGraw-Hill, 1983, pp 1697-1712.

REVIEW

All manuscripts are reviewed by the editors, and most manuscripts are sent to outside referees. Decisions concerning acceptance, revision, or rejection of a manuscript are usually made within three to six weeks. Every effort will be made to assure prompt publication of an accepted manuscript. A copyedited version will be sent to the author for approval prior to publication.

Address correspondence to Alan Blum, MD, Editor, *New York State Journal of Medicine*, P.O. Box 5404, 420 Lakeville Road, Lake Success, NY 11042.

MEDICAL SOCIETY OF THE STATE OF NEW YORK

Schedule of Sessions 1065
Officers, Councilors, and Trustees 1068
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Reference Committees 1075
Nominating Committee 1077
Report of the House Committee on Bylaws 1078

HOUSE OF DELEGATES

October 28 through 31, 1983
Concord Hotel

SCHEDULE of SESSIONS

Friday, October 28
Opening Session .... 1:00 p.m.

Saturday, October 29
Reference Committee Hearings .... 8:30 a.m.–12:30 p.m.
Reference Committee Hearings .... 1:30 p.m.–6:00 p.m.
Reference Committee Hearings .... 8:00 p.m. (to completion)

Sunday, October 30
Second Session .... 9:00 a.m.
Third Session .... 1:30 p.m.
Fourth Session .... 8:00 p.m. (if necessary)

Monday, October 31
Closing Session .... 9:00 a.m.

Pull-out section: a guide to the 1983 annual Meeting

Policy-making in The House of Delegates

This section of the New York State Journal of Medicine is a call to the Officers, Delegates, and Members of the Medical Society of the State of New York to attend the 177th Annual Meeting of the Society and the meeting of its House of Delegates; 297 delegates representing 61 county medical societies, 9 district branches, 27 scientific sections, 12 medical schools, and the medical student membership will meet at the Concord Resort Hotel, Kiamesha Lake, New York, October 28–31, 1983.

The officers, members of the Council and the Board of Trustees, past presidents of the MSSNY, the Commissioner of the New York State Department of Health, and the Past President of the American Medical Association from New York, Gerald D. Dorman, MD, are also official representatives to the House.

Mandated by the Bylaws of the Society, this section lists the names of elected representatives, delegates who are serving on reference committees, and selections of the Nominating Committee for the election of Officers, Councilors, Trustees and AMA Delegates. Also included are the amendments to the Bylaws which will be considered by the House of Delegates.

Since the House of Delegates is the legislative body of the Society, charged with the general management of the State Society and its affairs, members of the Society are urged to use this information to consult with and advise their representatives. Resolutions introduced by representatives bring members' concerns to the attention of the entire Society. Representatives not only have the responsibility to present the views of their constituents, but also to inform them of the actions taken by this governing body.

The House of Delegates also formulates policy for the Society. No Officer, Councilor, Board, Commission, Committee, or employee may initiate any policy unless such policy has been expressly approved by the House of Delegates or by the Council of the Society. If one were to choose the most important work of the House of Delegates, it would have to be that of the reference committees. Any member of the Medical Society of the State of New York has the right to appear before any reference committee and participate in its deliberations. I strongly urge members to use this forum to express their views.

John L. Clowe, MD, Speaker
House of Delegates

The transactions of the Medical Society of the State of New York in its inaugural year are reprinted below. When they were first reprinted in a commemorative volume in 1868, MSSNY Secretary William H. Bailey, MD wrote,

> They are now presented to the Profession with the hope that they will be appreciated, and that the memory of those few progressive representative medical gentlemen, through whose efforts the Medical Society of the State of New York was incorporated and organized, may be kept alive through future generations. From a small beginning we have become an important association, and if we adhere closely to the examples of our Fathers in the Profession, in their earnest, persevering efforts for the promotion of medical science and literature, we certainly have a brilliant future before us.

TRANSACTIONS.

1807.

PREFACE.

The statute enacted on the 4th of April, 1806, by the honorable the Legislature of this State, to incorporate Medical Societies, for the purpose of regulating the practice of physic and surgery, may be considered as among the first efforts made in this country, to give to the Medical Profession an honorable station in the community.

By investing the privileges of medical men in corporate communities formed of the members of that profession, the public may be freed from many impositions, and the usefulness and importance of the healing art will be extended. The history of all the learned professions imperiously proves this fact, that no one of those professions has ever become respectable or extensively useful to mankind, that was not under the restraint of the great body of its own members. Mankind have, in all ages and in all communities, been too often deceived by men who pretended to professional merit, and who by mean practices on the ignorance, follies and caprices of individuals, have gained an artificial importance in society.

This is more especially the case in the medical profession. Hence the importance of the law, placing the regulation thereof under incorporated Medical Societies. The advantages to the community in placing the regulation of the medical profession under the direction of its own members, is already sufficiently manifested, by the promotion of medical education, the encouragements given to physical inquiries and observation, and the diminished influence of pretenders to the healing art, throughout the State.

The Medical Society of the State was duly organized on the first Tuesday in February, 1807, when the following members were chosen officers:

William M'Clelland, President
Alexander Sheldon, Vice-President.
Moses Willard, Treasurer.
John Stearns, Secretary.

Censors.

John M. Mann, Columbia.
William Wheeler, Dutchess.
Lyman Cook, Westchester.
Moses Willard, Rensselaer.
Caleb Samson, Oneida.

Committee of Correspondence.

David R. Arnell, Orange.
John Ely, Greene.
Westell Willoughby, jun., Herkimer.
Alexander Sheldon, Montgomery.
John M. Mann, Columbia.

The Society enacted certain by-laws, and agreed to apply to the Legislature to divide the members of the Society into classes, and to make some provision for the support of the Society. They examined and licensed some candidates for the practice of physic and surgery.

At this early period of the establishment of the Society, it was considered proper to extend its usefulness in promoting medical inquiries in the different counties in the State. Accordingly each member of the Society was directed to present a geological and topographical description of the county in which he might practice, and also a history of such diseases as might prevail in his particular place of residence; and that each member should give an account of any remarkable case that might occur in his practice, together with its treatment, at the anniversary meetings of the Society.

The Society then adjourned to meet on the first Tuesday in February, 1808.

MEDICAL SOCIETY OF THE STATE OF NEW YORK

ORGANIZED 1807

Officers 1982–1983

Richard D. Eberle

Onondaga
President

Bernard J. Pisani

New York
President-Elect

Milton Rosenberg

Suffolk
Past-President

Allison B. Landolt

Westchester
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Monroe
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John A. Finkbeiner

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Assistant Treasurer

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Kings

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Morton Kurtz

Queens

Robert A. Mayers

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Stanley A. Steckler

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James M. Flanagan

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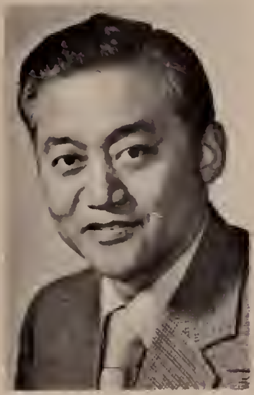
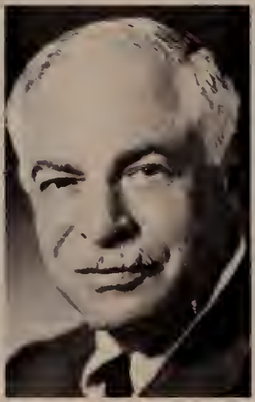

George Lim

Oneida


M. Theodore Tanenhaus

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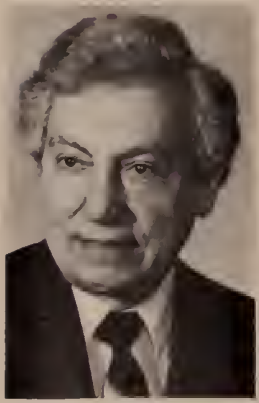
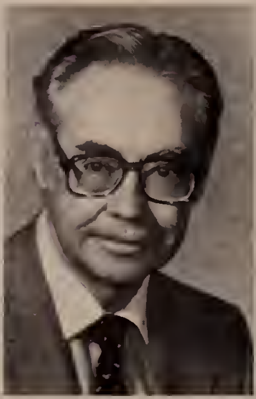
James H. Cosgriff, Jr.

Erie


Samuel M. Gelfand

Nassau


Richard A. Hughes

Warren

Antonio F. LaSorte

Broome

1983 HOUSE OF DELEGATES MEMBERS

The following is a list of members of the 1983 House of Delegates of the Medical Society of the State of New York:

Officers 1982—1983
President—Richard D. Eberle, Onondaga
President-Elect—Bernard J. Pisani, New York
Vice-President—Allison B. Landolt, Westchester
Secretary—Victor J. Tofany, Monroe
Assistant Secretary—Daniel F. O'Keeffe, Warren
Treasurer—John A. Finkbeiner, New York
Assistant Treasurer—Charles D. Sherman, Jr., Monroe
Speaker—John L. Clowe, Schenectady
Vice-Speaker—Charles N. Aswad, Broome

Councilors
Term Expires 1983
John H. Carter, Albany
Morton M. Kurtz, Queens
Robert A. Mayers, Westchester
Stanley A. Steckler, Suffolk

Term Expires 1984
Edgar P. Berry, New York
James M. Flanagan, Wayne
George Lim, Oneida
M. Theodore Tanenhaus, Kings

Term Expires 1985
James H. Cosgriff, Jr., Erie
Samuel M. Gelfand, Nassau
Richard A. Hughes, Warren
Antonio F. LaSorte, Broome

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Arthur H. Diedrick, Westchester
Ralph S. Emerson, Nassau
Joseph F. Shanaphy, Richmond
Carl Goldmark, Jr., New York
G. Rehmi Denton, Albany
Ralph M. Schwartz, Kings

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1959–1960—Henry I. Fineberg, Suffolk
1960–1961—Norman S. Moore, Tompkins
1961–1962—John M. Galbraith, Nassau
1966–1967—James M. Blake, Schenectady
1969–1970—Walter T. Heldmann, Richmond
1970–1971—Walter Scott Walls, Erie
1971–1972—George Himler, New York
1972–1973—Edward Siegel, Clinton
1974–1975—Lynn R. Callin, Monroe
1975–1976—Ralph S. Emerson, Nassau
1976–1977—George L. Collins, Jr., Erie
1977–1978—Carl Goldmark, Jr., New York
1978–1979—George T. C. Way, Dutchess
1979–1980—G. Rehmi Denton, Albany
1980–1981—Ralph M. Schwartz, Kings
1981–1982—Milton Rosenberg, Suffolk

Past President of the American Medical Association
Gerald D. Dorman, New York

Commissioner, New York State Department of Health

District Delegates
(*Elected Delegates of District Branches*)
First—B. Basil Hyman, Richmond
Second—Melvyn Bruckstein, Suffolk
Third—Thomas W. Greenlees, Schoharie
Fourth—Michael J. Lynch, Washington
Fifth—Duane M. Cady, Onondaga
Sixth—Vincent I. Maddi, Broome
Seventh—John E. Horn, Steuben
Eighth—George E. Taylor, Allegany
Ninth—Joel E. Mandel, Rockland

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(*Delegates from Scientific Sections*)
Allergy and Immunology—Lawrence T. Chiaramonte, Queens
Anesthesiology—Edward C. Sinnott, Nassau
Cardiovascular Diseases—Charles A. Bertrand, Westchester
Chest Diseases—Arthur Q. Penta, Schenectady
Dermatology and Syphilology—Franklin S. Glickman, Kings
Emergency Medicine—Ralph Altman, New York
Family and General Practice—James R. Nunn, Erie
Gastroenterology and Colon and Rectal Surgery—Marcelo A. Barreiro, Broome
Internal Medicine—Robert M. Kohn, Erie
Medical–Legal and Workers' Compensation Matters—Robert Katz, New York
Neurology—Charles R. Salamone, Monroe
Neurosurgery—Gerald L. Haines, Schenectady
Obstetrics and Gynecology—Leonard S. Weiss, Orange
Occupational Medicine—Howard R. Brown, New York
Ophthalmology—Francis J. Gilroy, Broome
Orthopedic Surgery—Basil B. Preefer, Bronx
Otolaryngology—Head and Neck Surgery—Fouad B. Michael, Nassau
Pathology, Clinical Pathology, and Blood Banking—Herbert Lansky, Erie
Pediatrics—Emanuel Chusid, Westchester
Physical Medicine and Rehabilitation—David Ernstoff, Queens
Plastic, Reconstructive, and Maxillofacial Surgery—Philip C. Bonanno, Westchester
Preventive Medicine and Public Health—Russell C. Johnson, Orange
Psychiatry—Jerome S. Silverman, New York
Radiology—Victor A. Panaro, Erie
School Health—Martin C. Ushkow, Onondaga
Surgery—Alfred F. Luhr, Jr., Erie
Urology—Lawrence Ravich, Nassau

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William O'Dwyer, Latham
Nathan P. Reed, Albany
Anthony P. Tartaglia, Albany

Allegany (*1*)
Muhammad Akmal Khan, Wellsville

Bronx (*10*)
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Marcos A. Charles, Bronx
Dattatraya G. Lanjewar, Pelham Manor
Michael N. Lavacca, Bronx
Charles Laverdi, Bronx
Siegfried Mayer, Bronx
Hugo M. Morales, Bronx
Raul Pohorille, New Rochelle
Govindappa Rangaiah, Scarsdale
Edward Shumofsky, Bronx

Broome (*4*)
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Louis W. Giordano, Endicott
Theodore R. Poritz, Binghamton
John F. Spring, Binghamton

Cattaraugus (*1*)
Ashesh Kumar Maulik, Portville

Cayuga (*1*)
Richard J. Freeman, Auburn

Chautauqua (*2*)
James G. Dahlie, Jamestown
George W. Lewis, Jamestown

Chemung (*2*)
Donald L. Brooks, Jr., Elmira
Gerald P. Schneider, Elmira

Chenango (*1*)
Norman C. Lyster, Jr., Norwich

Clinton (*1*)
Nicholas Scors, Plattsburgh

Columbia (*1*)
Rosewell D. Shaw, Stottville

Cortland (*1*)
Nicholas J. Gabriel, Cortland

Delaware (*1*)
Glen Joshpe, Stamford

Dutchess (*3*)
Stephen R. Chernay, Fishkill
Samuel Simon, Poughkeepsie
Seymour R. Stall, Poughkeepsie

Erie (*9*)
Victorino Anllo, Amherst
Frank J. Bolgan, Buffalo
Anthony J. Federico, Buffalo
George W. Fugitt, Tonawanda
Edmond J. Gicewicz, Buffalo
Milford C. Maloney, Buffalo
Leo E. Manning, Amherst
James F. Phillips, Jr., Buffalo
Joseph A. Prezio, Buffalo

Essex (*1*)
James E. McManus, Ticonderoga

Franklin (*1*)
Alfred A. Hartmann, Sr., Malone

Fulton (*1*)
Armand J. D'Errico, Gloversville

Genesee (*1*)
Alfred L. George, Batavia

Greene (*1*)
Shanmuga S. G. Sundaram, Cairo

Herkimer (*1*)
Krishna K. Vadlamudi, Ilion

Jefferson (*2*)
William B. Carter, Watertown

Kings (*19*)
Grace A. Altenau, Brooklyn
Lawrence Ames, Brooklyn
Norman S. Blackman, Brooklyn
Joseph R. Brennan, Brooklyn
Matthew Brody, Brooklyn
George W. Calvosa, Brooklyn
Vernal G. Cave, Brooklyn
Duncan W. Clark, Brooklyn
Philip Cohen, Brooklyn
Stanley I. Fishman, Brooklyn
Robert E. Gordon, Brooklyn
George Liberman, Brooklyn
A. W. Martin Marino, Jr., Brooklyn
Martin Markowitz, Brooklyn
Bentley D. Merrim, Brooklyn
Bernard S. Post, Manhasset
Abdul Rehman, Staten Island
Harold N. Schwinger, Brooklyn
Leo J. Swirsky, Brooklyn

Lewis (*1*)
John C. Herrman, Lowville

Livingston (*1*)
Sheppard Arluck, Geneseo

Madison (*1*)
Leonard A. Argentine, Oneida

Monroe (*7*)
Ronald C. Bruce, Rochester
William A. Dolan, Rochester
Nathaniel J. Hurst, Rochester
William A. Kern, Jr., Rochester
Mario B. LoMonaco, Rochester
Joyce M. McChesney, Rochester
Robert J. Peartree, Rochester

Montgomery (*1*)
Feori F. Pipito, Amsterdam

Nassau (*11*)
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Joseph I. Cohn, Rockville Centre
Ray S. Crampton, Syosset
Morton Goldfarb, Massapequa Park
Waldemar F. Hermann, Mineola
Paul C. Lehmuller, Levittown
Sidney Mishkin, Fort Salonga
Felix A. Monaco, Rockville Centre
John A. Ostuni, Freeport
Patricia G. Squillace, Rockville Centre
Jerome Zwanger, Massapequa

New York (*23*)
Arnold L. Bachman, New York City
Melvin M. Becker, Manhasset
David M. Benford, Larchmont
Robert S. Bernstein, New York City
Irwin J. Cohen, New York City
Hugh C. Davidson, Jr., New York City
Wilbur J. Gould, New York City
George Hyams, New York City
Virginia Kanick, New York City
Charles S. LaMonte, New York City
Vance Lauderdale, Jr., New York City
Aaron G. Meislin, New York City
George W. Melcher, Jr., New York City
Richard B. Nolan, New York City
Donna B. O'Hare, New York City
Stuart I. Orsher, New York City
Richard N. Pierson, Jr., New York City
William B. Rawls, Pleasant Valley
Isadore Rosenfeld, New York City
Albert M. Schwartz, New York City
Miriam Z. Seborer, New York City
Clifford L. Spingarn, New York City
Meyer Texon, New York City

Niagara (*3*)
Theodore C. Gerwig, Jr., North Tonawanda
James J. Kropelin, Niagara Falls
Clark G. Triftshauser, Lewiston

Oneida (*3*)
Robert D. Brennan, Utica
Robert M. George, Utica
Robert B. Wallace, Utica

Onondaga (*6*)
Richard A. Konys, Syracuse
Carl E. Marlow, Liverpool
Frank J. Piper, Syracuse
David L. Poushter, Syracuse
John T. Prior, Syracuse
George P. Tilley, Syracuse

Ontario (*2*)
Thomas A. McCormick, Geneva
Kenneth T. Steadman, Geneva

Orange (*4*)
Stanley L. Grossman, Newburgh
Ansel R. Marks, Middletown
Albert A. Mazzeo, Newburgh
W. Brewster Wolfe, Newburgh

Orleans (*1*)
Antoine A. Nassar, Albion

Oswego (*1*)
James F. Grant, Oswego

Otsego (*1*)
Rodman D. Carter, Cooperstown

Putnam (*1*)
Francis X. Pedlow, Yorktown Heights

Queens (*16*)
Daniel Chansky, Forest Hills
John W. V. Cordice, Jr., St. Albans
Alexander M. De la Garza, Flushing
Robert M. Farrell, Flushing
Fred N. Flatau, Flushing
Irving G. Frohman, Rockaway Beach
Leo Arthur Green, Jackson Heights
Victor Guarneri, Bayside
Edith Gutman, Beechhurst
Joseph Klements, Bayside
Hilda Ratner, Beechhurst
Felix R. Rosenhain, Forest Hills
Morton M. Safran, Jamaica
Ralph E. Schlossman, South Ozone Park
Lester R. Tuchman, Cos Cob, Connecticut
Ezra A. Wolff, Manhasset

Rensselaer (*2*)
Thomas D. Pemrick, Troy
William A. Whyland, Troy

Richmond (*4*)
Richard O. Healy, Staten Island
Gerald J. Lustig, Staten Island
William A. Schwarz, Southbury, Connecticut
Robert J. Silich, Staten Island

Rockland (*4*)
Robert J. Brenner, New York
Michael A. Kalvert, Bardonia
Roy H. Lieberman, Nanuet
Stanley H. Oransky, Bardonia

St. Lawrence (*1*)
Maurice J. Elder, Massena

Saratoga (*1*)

Schenectady (*3*)
Richard H. Lange, Schenectady
John M. Spring, Schenectady
Donald Wexler, Schenectady

Schoharie (1)
Frederick J. Michel, Cobleskill

Schuyler (*1*)
Joseph Y. Roberts, Watkins Glen

Seneca (*1*)
Donald W. Bidwell, Seneca Falls

Steuben (*2*)
Jack D. O'Neil, Corning
Wayne C. Templer, Corning

Suffolk (*11*)
William H. Bloom, Bay Shore
Stephen I. Braitman, Islip Terrace
Clive D. Caplan, Islip Terrace
Frank R. Collier, Port Jefferson
John G. Egner, West Islip
Robert E. Fear, Southampton
James A. Holleran, East Setauket
Phillip I. Levitan, Smithtown
Nathaniel B. Messinger, Islip Terrace
Frank H. Russell, Jr., Port Jefferson
Melvin Shuter, Islip Terrace

Sullivan (*1*)
J. Arthur Riesenberg, Liberty

Tioga (*1*)
Vinayak P. Bhavalkar, Waverly

Tompkins (*2*)

Ulster (*2*)
Joseph B. Basile, Kingston
John A. Cooke, Jr., Kingston

Warren (*2*)
Robert A. Francomano, Glens Falls
Larry J. Greenberg, Glens Falls

Washington (*1*)
Arnold Wise, Cambridge

Wayne (*1*)
Norman R. Loomis, Ontario

Westchester (*9*)
William P. Clark, Eastchester
Edwin I. Cleveland, Bronxville
Richard L. Fenton, Tarrytown
Armond V. Mascia, Tarrytown
Stanley M. Mendelowitz, Tarrytown
Richard L. Petrillo, Mount Vernon
John A. Ramsdell, White Plains
Thomas Dignan Rizzo, Bronxville
Michael Sierp, Yonkers

Wyoming (*1*)
Thaddeus Naprawa, Warsaw

Yates (*1*)

Medical School Delegates — 12
Albany Medical College—Joseph Theobald Doyle, Albany
Albert Einstein College of Medicine—Melvin N. Zelefsky, Bronx
Columbia University—Linda D. Lewis, New York
Cornell University Medical College—Jack Richard, New York
Mount Sinai School of Medicine—Sherman Kupfer, New York
New York Medical College—Saverio S. Bentivegna, New York
New York University School of Medicine—Stanford Wessler, New York
State University of New York at Brooklyn—Schuyler George Kohl, Kings
State University of New York at Buffalo—Ross Markello, Erie
State University of New York At Stony Brook—Tamarath Knigin Yolles, Suffolk
State University of New York at Syracuse—Daniel L. Dombroski, Onondaga
University of Rochester—Thomas E. Cardillo, Monroe

Medical Student Delegates — 3
Andrew Ku, New York City
Robert James Newborn, Albany
Elizabeth Anne Prezio, Syracuse

REFERENCE COMMITTEES

Credentials

William A. Schwarz, Richmond, *Chairman*
John E. Horn, Steuben
A. W. Martin Marino, Jr., Kings
Thomas D. Pemrick, Rensselaer
Edward C. Sinnott, Nassau

Reports of Officers

President
President-Elect
Secretary
Treasurer
Board of Trustees
Budget and Finance
Executive Vice-President
New York Delegation to the AMA
District Branches
Physicians' Home
Research and Development
Search Committee for the Position of Executive Vice-President
Résumé of Instructions from the 1982 House of Delegates

John W. Abbuhl, Albany, *Chairman*
Alfred L. George, Genesee
Wilbur J. Gould, New York
Paul C. Lehmuller, Nassau
Harold Schwinger, Kings

Bylaws

Résumé of Instructions from the 1982 House of Delegates

Stanley A. Steckler, Suffolk, *Chairman*
Robert M. Kohn, Erie
George Lim, Oneida
Joyce M. McChesney, Monroe
Jack Richard, New York

Scientific Activities, Publications, and Miscellaneous

Administrative Committee for the MSSNY Pension Program
American Association of Medical Assistants, New York State Society, Inc., Advisory to
Foreign Medical Graduates
General Insurance
Library, Archives, and Publications
Membership Benefits
Résumé of Instructions from the 1982 House of Delegates

Joseph A. Prezio, Erie, *Chairman*
Frank R. Collier, Suffolk
Joseph T. Doyle, Albany
Joseph Klements, Queens
Gerald P. Schneider, Chemung

Public Health and Education

Accident and Injury Prevention
Aging and Nursing Homes
Alcoholism
Cancer
Cardiovascular Disease
Child Abuse
Drug Abuse
Emergency Health Services
Environmental Quality
Health Care in Correctional Institutions
Home Health Care and Hospice
Liaison Committee with Nursing
Maternal and Child Health
Medical Aspects of Sports
Mental Health
Physicians' Committee
Preventive Medicine
School Health

Continuing Medical Education
Forensic Medicine
Information Technology in Medicine
Medical School Relationships
Scientific Program

Résumé of Instructions from the 1982 House of Delegates

Donna B. O'Hare, New York, *Chairman*
Matthew Brody, Kings
Marcos A. Charles, The Bronx
Norman R. Loomis, Wayne
Jack D. O'Neill, Steuben

Medical Services "A"

Alternative Health Care Delivery Systems
Health Planning
Interspecialty
Peer Review
PSRO
Social Security Administration Disability Benefits Program, Committee to Monitor and Provide Input Into
Workers' Compensation and Occupational Health
Résumé of Instructions from the 1982 House of Delegates

William A. Dolan, Monroe, *Chairman*
Hugh C. Davidson, Jr., New York
Robert E. Fear, Suffolk
Michael J. Lynch, Washington
Jerome Zwanger, Nassau

Medical Services "B"

Cost Containment
Health Manpower and Rural Medical Service
Hospital and Professional Relations
Medicaid
Medical Care Insurance
Résumé of Instructions from the 1982 House of Delegates
  Ad Hoc Committee on the Concept of Usual, Customary, and Reasonable Fees

Robert M. George, Oneida, *Chairman*
Edwin I. Cleveland, Westchester
Nicholas J. Gabriel, Cortland
John T. Prior, Onondaga
Hilda Ratner, Queens

Governmental Affairs and Legal Matters

Ethics
Judicial Council
Federal Legislation
State Legislation
Liaison Committee with HANYS
New York State Association of the Professions
Professional Medical Liability Insurance and Defense Board
Résumé of Instructions from the 1982 House of Delegates
  Ad Hoc Committee on Legislative Affairs
  Ad Hoc Committee to Review the Appeals Process from a Recommendation of the Professional Medical Liability Insurance and Defense Board

James J. Kropelin, Niagara, *Chairman*
Charles A. Bertrand, Westchester
Stanley L. Grossman, Orange
Sidney Mishkin, Nassau
Nathan P. Reed, Albany

Tellers

Daniel Dombroski, Onondaga, *Chairman*
Victorino Anllo, Erie
Robert J. Brenner, Rockland
Clive D. Caplan, Suffolk
Richard L. Fenton, Westchester

Sergeant at Arms

Michael N. Lavacca, The Bronx, *Chairman*
* Andrew Ku, New York
George Melcher, Jr., New York
J. Arthur Riesenberg, Sullivan
George Tilley, Onondaga

* Medical Student Membership Delegate.

NOMINATING COMMITTEE

To the House of Delegates, Ladies and Gentlemen:

In accordance with Article XI, Section 2 of the Bylaws of the Medical Society of the State of New York, the Nominating Committee met at the Society's headquarters, 420 Lakeville Road, Lake Success, New York, on Wednesday, May 11, 1983, at 11:00 a.m.

Members of the committee present were:
Member at Large—**Milton Rosenberg, M.D.,** Suffolk, *Chairman*
First District Branch—**John A. Finkbeiner, M.D.,** New York
Second District Branch—**Samuel M. Gelfand, M.D.,** Nassau
Third District Branch—**Frederick J. Michel, M.D.,** Schoharie
Fourth District Branch—**Franklyn C. Hayford, M.D.,** Schenectady
Fifth District Branch—**Robert M. George, M.D.,** Oneida
Sixth District Branch—**Charles N. Aswad, M.D.,** Broome
Seventh District Branch—**James M. Flanagan, M.D.,** Wayne
Eighth District Branch—**Milford C. Maloney, M.D.,** Erie
Ninth District Branch—**S. Sheldon Katz, M.D.,** Rockland
Member at Large—**Ralph M. Schwartz, M.D.,** Kings

After careful consideration of the recommendations submitted by the district branches, county medical societies, and scientific sections in response to a memorandum, dated January 27, 1983, and nominations from the floor, your committee respectfully nominated the following candidates for election on October 31, 1983:

President—**Bernard J. Pisani, M.D.,** New York
President Elect—**Allison B. Landolt, M.D.,** Westchester
Vice President—**Daniel F. O'Keeffe, M.D.,** Warren
Secretary—**Victor J. Tofany, M.D.,** Monroe
Assistant Secretary—**John H. Carter, M.D.,** Albany
Treasurer—**John A. Finkbeiner, M.D.,** New York
Assistant Treasurer—**Charles D. Sherman, Jr., M.D.,** Monroe
Speaker—**John L. Clowe, M.D.,** Schenectady
Vice-Speaker—**Charles N. Aswad, M.D.,** Broome
Trustees (two for five years)—**Edgar P. Berry, M.D.,** New York
—**Richard D. Eberle, M.D.,** Onondaga
Councilors (four for three years)—**Frederic W. Holcomb, Jr., M.D.,** Ulster
—**Robert A. Mayers, M.D.,** Westchester
—**Felix R. Rosenhain, M.D.,** Queens
—**Stanley A. Steckler, M.D.,** Suffolk

Delegates to the American Medical Association for two years commencing January 1, 1984:

David M. Benford, M.D., New York
Keith R. Brunckhorst, M.D., New York
John H. Carter, M.D., Albany
Duncan W. Clark, M.D., Kings
Irwin J. Cohen, M.D., New York
George L. Collins, Jr., M.D., Erie
Paul M. DeLuca, M.D., Broome
G. Rehmi Denton, M.D., Albany
John A. Finkbeiner, M.D., New York
James M. Flanagan, M.D., Wayne
Samuel M. Gelfand, M.D., Nassau
Robert M. George, M.D., Oneida
Morton Kurtz, M.D., Queens
Allison B. Landolt, M.D., Westchester
George Lim, M.D., Oneida
Daniel F. O'Keeffe, M.D., Warren
Bernard J. Pisani, M.D., New York
* **Elizabeth Ann Prezio**
Charles D. Sherman, Jr., M.D., Monroe
Clifford L. Springarn, M.D., New York
M. Theodore Tanenhaus, M.D., Kings
Victor J. Tofany, M.D., Monroe

* Medical Student

The eleven nominees receiving the largest number of votes will be delegates; the second eleven will be alternates.

Respectfully submitted,

Milton Rosenberg, M.D., *Chairman*

HOUSE COMMITTEE ON BYLAWS

To the House of Delegates, Ladies and Gentlemen:

The members of the House Committee on Bylaws are as follows:

Edgar P. Berry, M.D., *Chairman*	New York
Charles N. Aswad, M.D.	Broome
Robert M. Kohn, M.D.	Erie
Allison B. Landolt, M.D.	Westchester
George Lim, M.D.	Oneida
Daniel F. O'Keeffe, M.D.	Warren
Stanley A. Steckler, M.D.	Suffolk
Richard D. Eberle, M.D., *President, ex officio*	Onondaga
Victor J. Tofany, M.D., *Secretary, ex officio*	Monroe
John L. Clowe, M.D., *Speaker, ex officio*	Schenectady

A meeting of the Reference Committee on Bylaws was held at the Concord Hotel, Kiamesha Lake, New York, on November 8, 1982. The Reference Committee was appointed to receive input from delegates as to their thoughts on the resolutions referred to the House Committee on Bylaws. The input received from the meeting of the Reference Committee on Bylaws proved to be of great assistance to the House Committee on Bylaws.

In all, nine resolutions asking for amendments to the Bylaws were referred to the Committee for its consideration.

The following actions were taken with respect to the resolutions referred to this Committee:

Resolution 82-3, Method of Determining the Number of Councilors For Each District by Physician Membership Count

Introduced by Ninth District Branch

Whereas, Physician population in New York State has increased and distribution has changed over the last three decades; and

Whereas, The present method of determining the number of District Councilors is inequitable; therefore be it

Resolved, That Article IV, Section 1, paragraph 1 of the Bylaws of the Medical Society of the State of New York be amended by the deletion of the word twelve and the insertion of the word fifteen in its place.

Article IV, Section 1, paragraph 1 would then read as follows: (additions italicized, deletions in brackets)

"The Council shall be composed of the president, president-elect, vice-president, immediate past-president, secretary, assistant secretary, treasurer, assistant treasurer, speaker, vice-speaker, chairman of the Board of Trustees, and [twelve] *fifteen* councilors elected by the House of Delegates."

and be it further

Resolved, That Article IV, Section 1 be amended by the insertion of a new paragraph 3 to read as follows: (additions italicized)

"*Physician population based on membership in the county and state society shall determine the number of councilors for each district. One councilor for districts of 1,999 or less physician members; two councilors for districts of 2,000 to 3,999 physician members; three councilors for districts of 4,000 to 7,999 physician members; and four councilors for districts of 8,000 or more physician members, which shall be the maximum allowable per district.*"

and be it further

Resolved, That Article IV, Section 1, paragraph 4 be amended by the deletion of the word four and insertion of the word five before the word councilors. Article IV, Section 1, paragraph 4 would then read as follows: (additions italicized, deletions in brackets)

"[Four] *Five* Councilors shall be elected annually by the House of Delegates, each for a term of three years. In the event of a vacancy, a councilor shall be elected by the Council to serve until the next meeting.

Fiscal Note: $5,000 per year

Explanatory Notes: * District I with 11,705 members shall have four councilors; Districts II, VIII and IX with 3,457, 2,011, and 2,865 members respectively, shall have two councilors; and Districts III, IV, V, VI, VII, with 873, 782, 1,528, 846, and 1,423 respectively, shall have one councilor each.

Should physician population vary considerably in the future, the formula would apply and the Council with the approval of the House of Delegates could change the number of councilors when necessary without a bylaws change.

* Membership figures as of June 30, 1982

The Committee felt that if this resolution is approved, a fourth "Resolve" would be necessary. Such "Resolve" would read:

Resolved, That if the physician population varies in the future, the Council would be authorized to change the number of councilors, without a Bylaws change.

Upon careful discussion of the resolution, the Committee does not believe that increasing the number of councilors would necessarily improve the quality of debate. Not only would the increased number of councilors provide for an unwieldy forum, but, the Committee is concerned that it would also result in unnecessary added expense with small benefit. Furthermore, the Committee felt that the formula would be technically difficult to administer. Finally, the Committee is of the opinion that the problem reflects a local nature, and should be handled on the local level.

Therefore, the Committee, by a majority vote, recommends **DISAPPROVAL** of Resolution 82-3.

Resolution 82-27, Composition of the House of Delegates

Introduced by Bronx County Medical Society

Whereas, Certain members of the House of Delegates have not been duly designated by the membership of the component county medical societies to represent them in the House of Delegates; and

Whereas, These delegates are entitled to vote on issues pertaining to the Bylaws and governing policies of the Medical Society of the State of New York, while not truly representing them as duly designated delegates; and

Whereas, Some of these delegates may represent doctors who are not members of the component county medical societies; therefore be it

Resolved, That the Medical Society of the State of New York amend Article III, Section I, paragraph 1 of the Bylaws to read as follows: (deletions in brackets)

"The House of Delegates shall be composed of: (a) duly designated delegates from the component county medical societies; [(b) officers of the Medical Society of the State of New York, councilors, and trustees; (c) a duly designated delegate from each district branch; (d) a duly designated delegate from each scientific section; (e) duly designated delegates from the student membership; (f) the Commissioner of Health of the State of New York, or a deputy designated by him, provided that any representative shall be a member of the State Society; (g) past-presidents of the State Society and any past-president of the American Medical Association, provided that individual is a member of the Medical Society of the State of New York who shall be members for life; and (h) a representative from each of the medical schools in New York State, provided said representative is a member of the Medical Society of the State of New York."]

and be it further

Resolved, That Article III, Section 1, paragraphs 4 and 6 of the Bylaws be amended to read as follows: (deletions in brackets)

"The term of a delegate duly designated by a component county medical society, [district branch, scientific section, or medical school] shall begin at the first annual meeting of the House of Delegates subsequent to his designation.

"The student members of each medical school in New York State shall, at least sixty days prior to the annual meeting of the House of Delegates of the Medical Society of the State of New York, elect two members from among their number to represent them at the business meeting of the student members which shall be held immediately prior to the convening of the House of Delegates. At such meeting the representatives shall elect a chairman, vice-chairman, secretary, [delegates, and alternate delegates. The medical student membership shall be entitled to one delegate and one alternate delegate, and according to the rolls of the Medical Society of the State of New York, sixty days prior to the annual meeting, one additional delegate for each additional 400 student members, up to a maximum of 3 delegates.] No member shall hold more than one such office. The chairman, vice-chairman, and secretary shall conduct the business meeting [and the delegates and the alternate delegates shall represent the student members at the first annual meeting of the House of Delegates subsequent to their designation."]

NOTE: This change also affects:

Article III, Section 3, paragraph 4
Article V, Section 2, Speaker (third sentence)
Article XII, Section 1, paragraphs 1 and 4
Article XVI, paragraph 4
Article XVIII, Section 3, paragraphs 1 and 3

In the opinion of the Committee, this resolution would remove from the House of Delegates many people important to its deliberations, and, therefore, it would be detrimental to the functioning of the House.

The Committee unanimously recommends **DISAPPROVAL** of Resolution 82-27.

Resolution 82-33, Specialty Society Representation in the Medical Society of the State of New York

Introduced by Medical Society of the County of Queens, Inc.

Whereas, The present system of specialty society representation in MSSNY has become outmoded; and

Whereas, The present method of selecting officers of specialty sections and delegates from the sections has become slipshod and has even resulted in poorer, rather than better, specialty society representation; and

Whereas, The Scientific Program Committee has found that the present system has resulted, in many instances, in inefficient, cumbersome, and amateurish attempts to produce quality CME programs; and

Whereas, It is desirable that the specialty societies and MSSNY continue to cooperate on behalf of the total medical profession and that the specialties continue to have official representation in the House of Delegates of the Medical Society of the State of New York; and

Whereas, To improve specialty society representation in the House of Delegates and to insure more efficient specialty society cooperation in the preparation of the programs for the Annual CME Assembly, certain amendments to the Bylaws will be required; therefore be it

Resolved, That the Bylaws of the Medical Society of the State of New York be amended so as to abolish the sections and to permit the Council to draw up a list of approved* specialty socieites each one of which would then be entitled to select a delegate and an alternate delegate to the MSSNY House of Delegates; and be it further

Resolved, That each approved* specialty society be requested to recommend a representative to serve as a member of the Scientific Program Committee to MSSNY; and be it further

* Editorially changed to read "recognized," in the interest of consistency.

Resolved, That the following amendments to the Bylaws be approved by the House of Delegates to accomplish the purpose of the above resolution; and be it further

Resolved, That Article III, Section 1, paragraph 1 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

The House of Delegates shall be composed of: (a) duly designated delegates from the component county medical societies; (b) officers of the Medical Society of the State of New York, councilors, and trustees; (c) a duly designated delegate from each district branch; (d) a duly designated delegate from each [scientific section] *approved* specialty society;* (e) duly designated delegates from the student membership; (f) the Commissioner of Health of the State of New York, or a deputy designated by him, provided that any representative shall be a member of the State Society; (g) past-presidents of the State Society and any past president of the American Medical Association, provided that individual is a member of the Medical Society of the State of New York who shall be members for life; and (h) a representative from each of the medical schools in New York State, provided said representative is a member of the Medical Society of the State of New York.

and be it further

Resolved, That Article III, Section 1, paragraph 4 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

The term of a delegate duly designated by a component county medical society, district branch, [scientific section] *specialty society* or medical school shall begin at the first annual meeting of the House of Delegates subsequent to his designation.

and be it further

Resolved, That Article III, Section 2, paragraph 6 of the Bylaws be amended to read as follows: (deletions in brackets)

It shall provide for [a division of the scientific work of the Medical Society of the State of New York into appropriate sections, for] the organization of the district branches; for rules and regulations for its own government, and for the administration of the affairs of the State Society.

and be it further

Resolved, That Article III, Section 3 of the Bylaws be amended by deleting paragraph 2 (deletions in brackets)

[Such annual meetings may be held during the annual convention of the Medical Society of the State of New York through this is not required.]**

and be it further

Resolved, That Article XII of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

[SECTIONS AND SESSIONS]
SPECIALTY SOCIETY REPRESENTATION

[As designated by the House of Delegates, there shall be sections devoted to the scientific work of the Medical Society of the State of New York and sessions devoted to the scientific, cultural, historical, or economic subjects. Both sections and sessions shall meet during the annual convention of the State Society, under the supervision of the Council.]

[SECTION 1. SECTIONS]

The House of Delegates shall designate those [scientific sections] *specialty societies* entitled to representation in the Medical Society of the State of New York. Such [sections] *specialty societies* shall correspond to the Statewide specialty societies recognized by the Council of the Medical Society of the State of New York. [These scientific sections designated by the House of Delegates shall organize at their annual meeting by the election of officers. Officers to be elected shall include a chairman, a vice-chairman, a secretary, and a delegate to the House of Delegates. The chairman, vice-chairman, secretary, and delegate must be members of both the Statewide specialty societies and the Medical Society of the State of New York and shall be elected for one year terms with the exception of the secretary who shall be elected for such term as the section may deem desirable.]

Each of the Statewide specialty societies recognized by the Council of the Medical Society of the State of New York shall be requested to submit to the office of the Executive Vice-President the name of one nominee for [each office of their corresponding sections] *delegate and one for alternate delegate* not less than ninety days prior to the [sections] and annual [business] meeting *of the House of Delegates*. [Such nominees shall be voted on, together with all other nominees submitted, at the annual business meeting of the section.] All such nominees must be members of the Medical Society of the State of New York.***

[To participate in the election of any section, a member of the Medical Society of the State of New York must be registered with such section.]

Should the delegate *or alternate* of a [scientific section] *specialty society* be unable to serve in the House of Delegates, the [chairman] *president*, of the [section] *specialty society* shall designate a substitute delegate and shall so notify the secretary of the Medical Society of the State of New York in writing.

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* Editorially changed to read "recognized," in the interest of consistency.

** If Resolution 82-33 is adopted by the House of Delegates Article III, Section 3, paragraph 4 of the Bylaws will be editorially changed so that resolutions may be submitted by recognized specialty societies.

*** Editorially changed to read:

Each of the Statewide specialty societies recognized by the Council of the Medical Society of the State of New York shall be requested to submit to the office of the Executive Vice-President the name of one delegate and one alternate delegate not less than ninety days prior to the annual meeting of the House of Delegates. All such designated delegates must be members of the Medical Society of the State of New York.

[The officers of the various sections shall prepare programs for their section under the direction and subject to the approval of the Council.]

[No new section shall be created by the House of Delegates unless a session devoted to its subject matter or specialty shall have been held at at least two successive annual conventions.]

[SECTION 2. SESSIONS]

[A session shall be a single meeting of a group to discuss scientific, cultural, historical, or economic subjects, under the direction and subject to the approval of the Council.]

[Each session shall have a chairman and a secretary who shall be appointed by the president with the approval of the Council.]

The Scientific Program Committee shall be responsible for planning and presenting the program at the Annual Continuing Medical Education Assembly which shall be held at a time and place designated by the Council. The Committee shall be composed of a chairman and associate chairmen appointed annually by the President of the Medical Society of the State of New York with the approval of the Council. It shall also be composed of one MSSNY member appointed by each of the specialty societies approved by the Council as provided in Article XII, paragraph 1 of these Bylaws.*

and be it further

Resolved, That Article XIII, Section 1 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

SECTION 1. ANNUAL [CONVENTION] *MEETING OF THE HOUSE OF DELEGATES*

There shall be an annual [convention] *meeting of the House of Delegates* of the Medical Society of the State of New York to be held at a time and place designated by the House of Delegates or by the Council.

[This convention shall include the annual scientific program which shall include the annual meetings of the sections and sessions, scientific motion pictures, and exhibits, and such other activities and presentations as the House of Delegates or Council may direct.]

[The annual meetings of the Medical Society of the State of New York and the House of Delegates may or may not be held at such convention pursuant to the provisions of Article III, Section 3 of these Bylaws.]

and be it further

Resolved, That Article XIII, Section 4, paragraphs 1, 4, 5, 6, and 8 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

The notices of the annual [convention] *meeting of the House of Delegates* and annual and special meetings of the Medical Society of the State of New York shall state the date, place, and hour and shall be mailed postpaid to each member by first class mail not less than ten nor more than fifty days before a meeting.

Each member in attendance at the annual [convention] *meetings* of the Medical Society of the State of New York shall enter his name and the name of the component county medical society to which he belongs in a register to be kept by the secretary of the State Society for that purpose. No member shall take part in any of the proceedings of such meetings until he shall have complied herewith.

All members in good standing so registered may attend and participate in the proceedings and discussions of the [scientific meetings] *Annual Continuing Medical Education Assembly* of the Medical Society of the State of New York [and of the sections and sessions.]

[A distinguished physician of a foreign country or a physician not a resident of this State who is a member of his own state medical association may become a guest during any annual convention upon the invitation of the president or officers of the Medical Society of the State of New York, and may be accorded the privilege of participating in all the scientific programs of the convention.]

All papers read before the Medical Society of the State of New York at its Annual [convention by its members] *Continuing Medical Education Assembly* shall become the property of the State Society. Whenever such paper shall be deemed not acceptable for publication in the New York State Journal of Medicine it shall be returned to the author as promptly as possible after its receipt in the publication office of the State Society.

and

Resolution 82-47, Change From Specialty Section to Specialty Society Representation in the MSSNY House of Delegates

Introduced by Council of the Medical Society of the State of New York

Whereas, The Committee on Research and Development has determined specialty societies could be better represented by direct representation in the House of Delegates rather than the present method of representation by scientific section; and

Whereas, The Scientific Program Committee had come to the same conclusion that there is no longer a need for the specialty sections in the Medical Society of the State of New York, however, it is necessary that the specialty societies and MSSNY continue to cooperate on behalf of the total medical profession and that these societies continue to have representation in the MSSNY House of Delegates; therefore be it

Resolved, That the Medical Society of the State of New York abolish representation by scientific sections and change the Bylaws of the MSSNY to provide for direct representation of specialty societies in the House of Delegates; and be it further

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* Editorially changed to read "recognized," in the interest of consistency.

Resolved, That the Bylaws be amended to accommodate this change; and be it further

Resolved, That Article III, Section 1, paragraph 1 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

The House of Delegates shall be composed of: (a) duly designated delegates from the component county medical socieites; (b) officers of the Medical Society of the State of New York, councilors, and trustees; (c) a duly designated delegate from each district branch; (d) a duly designated delegate from each [scientific section] *recognized specialty society;* (e) duly designated delegates from the student membership; (f) the Commissioner of Health of the State of New York, or a deputy designated by him, provided that any representative shall be a member of the State Society; (g) past-presidents of the State Society and any past president of the American Medical Association, provided that individual is a member of the Medical Society of the State of New York who shall be members for life; and (h) a representative from each of the medical schools in New York State, provided said representative is a member of the Medical Society of the State of New York.

and be it further

Resolved, That Article III, Section 1, paragraph 4 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

The term of a delegate duly designated by a component county medical society, district branch, [scientific section] *specialty society* or medical school shall begin at the first annual meeting of the House of Delegates subsequent to his designation.

and be it further

Resolved, That Article III, Section 2, paragraph 6 of the Bylaws be amended to read as follows: (deletions in brackets)

It shall provide for [a division of the scientific work of the Medical Society of the State of New York into appropriate sections, for] the organization of the district branches; for rules and regulations for its own government, and for the administration of the affairs of the State Society.

and be it further

Resolved, That Article III, Section 3 of the Bylaws be amended by deleting paragraph 2 (deletions in brackets)

[Such annual meetings may be held during the annual convention of the Medical Society of the State of New York though this is not required.]**

and be it further

Resolved, That Article XII of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

[SECTIONS AND SESSIONS]
SPECIALTY SOCIETY REPRESENTATION

[As designated by the House of Delegates, there shall be sections devoted to the scientific work of the Medical Society of the State of New York and sessions devoted to the scientific, cultural, historical or economic subjects. Both sections and sessions shall meet during the annual convention of the State Society, under the supervision of the Council.]

[SECTION 1. SECTIONS]

The House of Delegates shall designate those [scientific sections] *specialty societies* entitled to representation in the Medical Society of the State of New York. Such [sections] *specialty societies* shall correspond to the Statewide specialty societies recognized by the Council of the Medical Society of the State of New York. [These scientific sections designated by the House of Delegates shall organize at their annual meeting by the election of officers. Officers to be elected shall include a chairman, a vice-chairman, a secretary, and a delegate to the House of Delegates. The chairman, vice-chairman, secretary, and delegate must be members of both the Statewide specialty societies and the Medical Society of the State of New York and shall be elected for one year terms with the exception of the secretary who shall be elected for such term as the section may deem desirable.]

Each of the Statewide specialty societies recognized by the Council of the Medical Society of the State of New York shall be requested to submit to the office of the Executive Vice-President the name of one nominee for [each office of their corresponding sections] *delegate and one for alternate delegate* not less than ninety days prior to the sections] annual [business] meeting *of the House of Delegates.* [*Such nominess shall be voted on, together with all other nominees submitted, at the annual business meeting of the section.*] *All such nominees must be members of the Medical Society of the State of New York.****

[To participate in the election of any section, a member of the Medical Society of the State of New York must be registered with such section.]

** If Resolution 82-47 is adopted by the House of Delegates Article III, Section 3, paragraph 4 of the Bylaws will be editorially changed so that resolutions may be submitted by recognized specialty societies.

*** Editorially changed to read:

Each of the Statewide specialty societies recognized by the Council of the Medical Society of the State of New York shall be requested to submit to the office of the Executive Vice-President the name of one delegate and one alternate delegate not less than ninety days prior to the annual meeting of the House of Delegates. All such designated delegates must be members of the Medical Society of the State of New York.

Should the delegate *or alternate* of a [scientific section] *specialty society* be unable to serve in the House of Delegates, the [chairman] *president* of the [section] *specialty society* shall designate a substitute delegate and shall so notify the secretary of the Medical Society of the State of New York in writing.

[The officers of the various sections shall prepare programs for their section under the direction and subject to the approval of the Council.]

[No new section shall be created by the House of Delegates unless a session devoted to its subject matter or specialty shall have been held at at least two successive annual conventions.]

[SECTION 2. SESSIONS]
[A session shall be a single meeting of a group to discuss scientific, cultural, historical, or economic subjects, under the direction and subject to the approval of the Council.]

[Each session shall have a chairman and a secretary who shall be appointed by the president with the approval of the Council.]

The Scientific Program Committee shall be responsible for planning and presenting the program at the Annual Continuing Medical Education Assembly which shall be held at a time and place designated by the Council. The Committee shall be composed of a chairman and associate chairmen appointed annually by the President of the Medical Society of the State of New York with the approval of the Council. It shall also be composed of one MSSNY member appointed by each of the specialty societies approved by the Council as provided in Article XII, paragraph 1 of these Bylaws.*

and be it further

Resolved, That Article XIII, Section 1 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

SECTION 1. ANNUAL [CONVENTION] *MEETING OF THE HOUSE OF DELEGATES*

There shall be an annual [convention] *meeting of the House of Delegates* of the Medical Society of the State of New York to be held at a time and place designated by the House of Delegates or by the Council.

[This convention shall include the annual scientific program which shall include the annual meetings of the sections and sessions, scientific motion pictures, and exhibits, and such other activities, and presentations as the House of Delegates or Council may direct.]

[The annual meetings of the Medical Society of the State of New York and the House of Delegates may or may not be held at such convention pursuant to the provisions of Article III, Section 3 of these Bylaws.]

and be it further

Resolved, That Article XIII, Section 4, paragraphs 1, 4, 5, 6, and 8 of the Bylaws be amended to read as follows: (additions italicized, deletions in brackets)

The notices of the annual [convention] *meeting of the House of Delegates* and annual and special meetings of the Medical Society of the State of New York shall state the date, place, and hour and shall be mailed postpaid to each member by first class mail not less than ten nor more than fifty days before a meeting.

Each member in attendance at the annual [convention] *meetings* of the Medical Society of the State of New York shall enter his name and the name of the component county medical society to which he belongs in a register to be kept by the secretary of the State Society for that purpose. No member shall take part in any of the proceedings of such meetings until he shall have complied herewith.

All members in good standing so registered may attend and participate in the proceedings and discussions of the [scientific meetings] *Annual Continuing Medical Education Assembly* of the Medical Society of the State of New York [and of the sections and sessions.]

[A distinguished physician of a foreign country or a physician not a resident of this State who is a member of his own state medical association may become a guest during any annual convention upon the invitation of the president or officers of the Medical Society of the State of New York, and may be accorded the privilege of participating in all the scientific programs of the convention.]

All papers read before the Medical Society of the State of New York at its Annual [convention by its members] *Continuing Medical Education Assembly* shall become the property of the State Society. Whenever such paper shall be deemed not acceptable for publication in the New York State Journal of Medicine it shall be returned to the author as promptly as possible after its receipt in the publication office of the State Society.

Because of the similarity of content, the Committee considered Resolutions 82-33 and 82-47 at the same time.

George J. Lawrence, Jr., M.D., Director, MSSNY Division of Scientific Activities, testified for the Scientific Program Committee as follows:

"The Scientific Program Committee is of the opinion that with the proliferation of Specialty Societies there is no longer a need for the specialty sections in MSSNY (the AMA abolished the sections years ago). However, it is necessary that the Specialty Societies and MSSNY continue to cooperate on behalf of the total medical profession and that these societies continue to have official representatives in the MSSNY House of Delegates. From the standpoint of improved Specialty Society representation in the House and more efficient Specialty

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* Editorially changed to read "recognized," in the interest of consistency.

Society cooperation with the preparation of the Annual CME Assembly, the Committee believes certain changes in the present structure are necessary.

"The simplest solution would seem to be that the sections be abolished and the Council draw up a list of recognized Specialty Societies, each one of which would then be entitled to select a delegate and an alternate delegate to the MSSNY House of Delegates.

"Each Specialty Society would also be requested to appoint a representative to serve as a member of the Scientific Program Committee to the MSSNY."

Based on the information submitted by the Scientific Program Committee, the House Committee on Bylaws unanimously recommends **APPROVAL** of Resolutions 82-33 and 82-47.

Resolution 82-34, Life Membership

Introduced by Medical Society of the County of Monroe, Inc.

Whereas, The Medical Society of the State of New York amended its Bylaws in 1978 concerning life membership; and

Whereas, The Medical Society of the County of Monroe, Inc., in considering the changes in the MSSNY life membership category, believes there is no justifiable reason why a physician, who has been an active member in good standing for ten consecutive years should not be entitled to life membership upon retirement at the age of 65 rather than 70; and

Whereas, The Monroe County Medical Society also believes there is no justifiable reason why a physician who has been an active member in good standing for ten consecutive years and continues to practice should not be entitled to life membership at age 70 rather than 75; therefore be it

Resolved, That Article II, Section I, paragraph 6 of the Bylaws of the Medical Society of the State of New York be amended by deleting the words "seventy" and "seventy-five" and substituting the words "sixty-five" and "seventy," respectively.

Article II, Section I, paragraph 6 would then read as follows: (additions italicized, deletions in brackets)

"An active member in good standing who had completely withdrawn from the active practice of medicine and who has been a member in good standing for the ten consecutive years prior to the attainment of the age of [seventy] *sixty-five* years or an active member in good standing who continues the active practice of medicine and who has been a member in good standing for the ten consecutive years prior to the attainment of the age of [seventy-five] *seventy* years, or an active member in good standing for ten consecutive years or more who is permanently disabled, may apply for life membership. The House of Delegates or the Council may waive the requirements in a proper case where there appear to be extenuating circumstances. He shall apply for such life membership to the component county medical society of which he is a member. His application shall be governed by the constitution and bylaws of the component county medical society relative to active membership."

NOTE: This resolution is based on our experience that indicates that physicians no longer remain in active practice until disability or death occurs. This resolution takes into account that many hospital bylaws require retirement at age 65. Lastly, this resolution speaks to the loyalty and years of contributing dues dollars to organized medicine to support the gesture of granting life membership at age 65 for those who retire, as opposed to the purely fiscal note that MSSNY staff attach to this and related resolutions. While their data is accurate, it reflects a one-time painful adjustment, and, in our opinion, will eventually increase membership and will get rid of the numerous problems that arise on an annual basis when a physician is confronted with our unreasonable criteria for life membership

In the 1982 meeting of the House of Delegates, Resolution 79-39, Life Membership, was adopted. Article II, Section 1, paragraph 6, of the Bylaws, therefore, now reads as follows:

"An active member in good standing who has completely withdrawn from the active practice of medicine and who has been a member in good standing for ten consecutive years or an active member in good standing who continues the active practice of medicine and who has been a member in good standing for the ten consecutive years prior to the attainment of the age of seventy years, or an active member in good standing for ten consecutive years or more who is permanently disabled, may apply for life membership. The House of Delegates or the Council may waive the requirements in a proper case where there appear to be extenuating circumstances. He shall apply for such life membership to the component county medical society of which he is a member. His application shall be governed by the constitution and bylaws of the component county medical society relative to active membership."

Furthermore, Resolution 82-34 was amended on the floor of the House of Delegates in 1982 to require life members to pay annual dues of $50.00 unless waived by extenuating circumstances.

Based upon the adoption of Resolution 79-39 and the amendment on the floor of the House of Delegates in 1982, Resolution 82-34 should read as follows:

"**Resolved,** That Article II, Section 1, paragraph 6 of the Bylaws be amended by deleting the phrase "ten consecutive years" in line 3 and by inserting in its place, "the ten consecutive years prior to the age of sixty-five."

Article II, Section 1, paragraph 6 would then read as follows: (additions italicized, deletions in brackets)

"An active member in good standing who has completely withdrawn from the active practice of medicine and who has been a member in good standing for [ten consecutive years] *the ten consecutive years prior to the age of sixty-five years*, or an active member in good standing who continues the active practice of medicine and who has been a member in good standing for the ten consecutive years prior to the attainment of the age of seventy years, or an active member in good standing for ten consecutive years or more who is permanently disabled, may apply for life membership. The House of Delegates or the Council may waive the requirements in a proper case where there appear to be extenuating circumstances. He shall apply for such life membership to the component county medical society of which he is a member. His application shall be governed by the constitution and bylaws of the component county medical society relative to active membership.";

and be it further

Resolved, That the Bylaws of the MSSNY be amended by deleting sentence one of Article II, Section 2, paragraph 3, and by inserting the sentences, "Life members shall pay annual dues of fifty dollars, unless waived by the Council for extenuating circumstances, but shall not be subject to assessments. Any individual elected to Life Membership prior to October 1983 shall not be subject to Medical Society of the State of New York dues or assessments. Life members shall be accorded all the rights and privileges of active membership."

Article II, Section 2, paragraph 3 will then read as follows: (additions italicized, deletions in brackets)

["Life members shall not be subject to Medical Society of the State of New York dues or assessments but shall be accorded all the rights and privileges of active membership.] *Life members shall pay annual dues of fifty dollars, unless waived by the Council for extenuating circumstances, but shall not be subject to assessments. Any individual elected to life membership prior to October 1983 shall not be subject to Medical Society of the State of New York dues or assessments. Life members shall be accorded all the rights and privileges of active membership.* They shall be entitled to receive the New York State Journal of Medicine and the News of New York, but the Medical Directory of New York State only on request.";

and be it further

Resolved, That paragraph 4 of Article XV of the Bylaws of the MSSNY be deleted and that a new paragraph be inserted to read: "Life members shall pay dues and assessments as provided by Article II, Section 2, paragraph 3 of these Bylaws. Honorary members shall not be required to pay dues or assessments to the Medical Society of the State of New York."

Article XV, paragraph 4, would then read as follows: (additions italicized, deletions in brackets)

["Life and honorary members shall not be required to pay dues or assessments to the Medical Society of the State of New York.] *Life members shall pay dues and assessments as provided by Article II, Section 2, paragraph 3 of these Bylaws. Honorary members shall not be required to pay dues or assessments to the Medical Society of the State of New York.*"

Upon a thorough review of this resolution, the Committee did not feel that requiring life members to pay annual dues of $50.00 would be equitable. In addition, the income generated by the proposal would not be significant enough to counteract the ill will that the resolution would cause.

The Committee did feel, however, that the first "Resolve" would improve the current provisions under Article II, Section 1, paragraph 6, by imposing an age requirement for members applying for life membership on the basis of withdrawing from the active practice of medicine.

The Committee, therefore, unanimously recommends that the first "Resolve" in Resolution 82-34 be **APPROVED,** but unanimously recommends that the second and third "Resolves" be **DISAPPROVED.**

Resolution 82-71, Life Membership

Introduced by Section on Psychiatry

Whereas, The method of determining life membership has met with some dissatisfaction from members of the Medical Society of the State of New York; and

Whereas, A more direct method would satisfy the membership; therefore be it

Resolved, That the Medical Society of the State of New York amend Article II, Section I, paragraph 6 of the Bylaws to read as follows: (additions italicized, deletions in brackets)

"An active member in good standing [who has completely withdrawn from the active practice of medicine and who has been a member in good standing for ten consecutive years, or an active member in good standing who continues the active practice of medicine and who has been a member in good standing for the ten consecutive years prior to the attainment of the age of seventy years*] *shall be eligible for life membership and exempt from paying dues and assessments when the sum of the member's age at the start of the fiscal year shall equal 100.* An active member in good standing for ten consecutive years or more who is permanently disabled, may apply for life membership. The House of Delegates or the Council may waive the requirements in a proper case where there appear to be extenuating circumstances. He shall apply for such life membership to the component county medical society of which he is a member. His application shall be governed by the constitution and bylaws of the component county medical society relative to active membership."

The Committee feels that not only would the administration of this resolution be difficult, but serious inequities would result.

The Committee, therefore, recommends **DISAPPROVAL** of Resolution 82-71.

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* Editorially changed to incorporate 1983 amendment to this portion of the Bylaws.

Resolution 82-35, Delegate Representing the Resident Membership at the Annual Meeting of the House of Delegates of the Medical Society of the State of New York

Introduced by George L. Collins, Jr., M.D., as an Individual

Whereas, Resolution 80-31, as amended, was adopted by the House of Delegates at its annual meeting in 1981; and

Whereas, The adoption of Resolution 80-31 has created a resident membership within the Medical Society of the State of New York; and

Whereas, There are currently in excess of 300 resident members in good standing with the Medical Society of the State of New York; and

Whereas, The Bylaws of the MSSNY do not currently provide the resident membership with a delegate to represent them at the House of Delegates of the MSSNY; and

Whereas, This has resulted in an inequitable situation, particularly since the student membership is entitled to be represented by up to (3) delegates under Article III of the Bylaws of the MSSNY; therefore be it

Resolved, That Article III, Section 1, paragraph 1 of the Bylaws of the Medical Society of the State of New York be amended by adding the words "and (i) a delegate representing the resident membership."

Article III, Section 1, paragraph 1 would then read as follows: (additions italicized)

"The House of Delegates shall be composed of: (a) duly designated delegates from the component county medical societies; (b) officers of the Medical Society of the State of New York, councilors, and trustees; (c) a duly designated delegate from each district branch; (d) a duly designated delegate from each scientific section; (e) duly designated delegates from the student membership; (f) the Commissioner of Health of the State of New York, or a deputy designated by him, provided that any representative shall be a member of the State Society; (g) past-presidents of the State Society and any past president of the American Medical Association, provided that individual is a member of the Medical Society of the State of New York who shall be members for life; (h) a representative from each of the medical schools in New York State, provided said representative is a member of the Medical Society of the State of New York; *and (i) a delegate representing the resident membership.*"

and be it further

Resolved, That Article III, Section 1 be amended by adding a new paragraph 7 to read as follows: (additions italicized)

"The resident membership shall be entitled to elect one delegate to the House of Delegates. The method of electing the resident membership delegate shall be determined by the Council." *

Upon discussion, the Committee stated that Resolution 82-35 would encourage resident membership and would give residents greater interest in the affairs of organized medicine. The Committee, therefore, unanimously recommends **APPROVAL** of Resolution 82-35.

Resolution 82-36, Hospital Medical Staff Delegate to the House of Delegates of the Medical Society of the State of New York

Introduced by Milton Rosenberg, M.D., as an Individual

Whereas, A recent study of the American Medical Association* found that an increasing number of physicians are entering full-time and part-time contractual arrangements with hospitals; and

Whereas, This same AMA study stated:

"No other element of the health care delivery system is likely to be more crucial or more subject to forced change than the relationship between physicians, hospitals, and other health facilities. The medical staffs of these health care institutions need support from the federation if they are to retain their leadership roles and to be an effective unit in shaping their future relationships with hospitals and other health care facilities."; and

Whereas, There is a growing recognition of the need to provide hospital medical staff representation in organized medicine so that the major issues affecting physicians in hospital medical staffs can be adequately addressed; and

Whereas, The House of Delegates of the American Medical Association has appointed a Study Committee to address the possible need for a Section on Medical Staffs; and

Whereas, The Idaho Medical Association has recently amended its Bylaws to provide for a hospital medical staff section; therefore be it

Resolved, That the Medical Society of the State of New York amend its Bylaws to include a new Article XII-b to provide a hospital medical staff section to read as follows: (additions italicized)

"The Hospital Medical Staff Section is authorized to be represented in the House of Delegates by (1) delegate. The Hospital Medical Section shall represent physicians on the medical staffs of acute care hospitals located in New York State.";

and be it further

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* If Resolution 82-35 is adopted by the House of Delegates, Article III, Section 3, paragraph 4 of the Bylaws will be amended to allow the delegate representing the resident membership to submit resolutions to the House of Delegates.

* Final Report on Hospital/Health Facility Medical Staffs, 1982 Prepared by the AMA Hospital/Health Facility Medical Staffs Task Force

Resolved, That Article XII-b include a second paragraph to provide as follows: (additions italicized)

"The method of electing the delegate representing the Hospital Medical Staff Section shall be determined by the Council." *

After a full discussion, the Committee felt that this resolution is necessary to address the severe challenges that organized medicine faces with problems between medical staffs and hospitals. Not only would this resolution encourage members of medical staffs to join the State Medical Society, but with a delegate representing hospital medical staffs the problems faced by medical staffs can be brought before the House of Delegates for review.

The Committee, therefore, recommends by a majority vote, to **APPROVE** Resolution 82-36.

Resolution 82-49, Members of the Council Serving on the Board of Directors of the Medical Liability Mutual Insurance Company

Introduced by Section on Surgery

Whereas, The single most important issue facing physicians in this State concerns the availability and cost of professional medical liability insurance; and

Whereas, The Medical Liability Mutual Insurance Company, although established by the Medical Society of the State of New York, is a separate corporation whose actions are governed by its own Board of Directors; and

Whereas, The decisions made by the Company's Board are legally required to be made in the best interests of the corporate entity even if those interests are not consonant with the best interests of its physician insureds; and

Whereas, The best interests of the physicians should be effectuated by the Medical Society of the State of New York through the House of Delegates or the Council; and

Whereas, There are numerous occasions when the interests of physician members of the Medical Society of the State of New York will be at variance with those of the Insurance Company; and

Whereas, A substantial number of the members of the Council of the Society sit on the Board of Directors; and

Whereas, This situation, if not actually constituting a conflict of interest, at the very least gives the appearance of such a conflict; and

Whereas, Irrespective of this situation, there remains a need for a liaison between the Council of the Society and the Board of Directors of the Company; therefore be it

Resolved, That the Bylaws of the Medical Society of the State of New York be amended to provide that no more than three (3) members of the Council concurrently sit on the Board of Directors of the Medical Liability Mutual Insurance Company; and be it further

Resolved, That the Bylaws of the Medical Society of the State of New York be amended to add a new paragraph at the end of Article IV, Section 1, thereof to read as follows: (additions italicized)

"No more than three members of the Council shall concurrently serve on the Board of Directors of the Medical Liability Mutual Insurance Company. If a member is elected to the Board of Directors of the Medical Liability Mutual Insurance Company at a time when three existing members of the Council are also serving as Directors, said member of the Council shall either decline the directorship to which he was just elected or, in the alternative, resign his position as a member of the Council. Should an individual member of the Board of Directors of the Medical Liability Mutual Insurance Company be elected as a member of the Council to the Medical Society of the State of New York at a time in which three existing members of the Council were current members of the Board of Directors, said individual would either resign as a member of the Board of Directors or decline to serve in the position of member of the Council."

Upon review, the Committee does not feel that a conflict of interest exists and feels that the resolution lacks merit. It is the strong feeling of the House Committee on Bylaws that this resolution would in no way ameliorate the medical malpractice situation but would only diminish the influence that the Medical Society has with the Medical Liability Mutual Insurance Company (MLMIC).

The deliberate weakening of the Medical Society's influence with the MLMIC is extremely unwise. The MLMIC was formed by the Medical Society at great expense to the Medical Society. It was recognized that organized medicine must have a voice within the insurance mechanism. Now, in no sense is the membership of the Board of Directors of the MLMIC limited to members of the Council and Board of Trustees of the State Medical Society. Members of specialty societies, county medical societies, and other members of the State Medical Society throughout the State may apply for seats on the Board of Directors of the MLMIC. To artificially limit the number of members of the Council of the State Medical Society who may concurrently serve on the Board of MLMIC, however, is unsound and inequitable.

The Committee unanimously recommends **DISAPPROVAL** of Resolution 82-49.

Your chairman would like to thank, in addition to the members of the Committee and the physicians who testified before it, those members of staff who have greatly aided this Committee; Donald R. Moy, J.D., General Counsel, Ms. Julie Pichardo, Legal Assistant, Mrs. Joan Grimm and Ms. Barbara Lacey, who provided their secretarial assistance to the Committee.

Respectfully submitted,

Edgar P. Berry, M.D. *Chairman*

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* If Resolution 82-36 is adopted by the House of Delegates, Article III, Section 1, paragraph 1 of the Bylaws will be amended to include a duly designated delegate from the Hospital Medical Staff Section in the composition of the House of Delegates.

Article III, Section 3, paragraph 4 will also be amended to allow the delegate from the Hospital Medical Staff Section to submit resolutions to the House of Delegates.

MEDICAL SOCIETY OF THE STATE OF NEW YORK
ORGANIZED 1807

1982 HOUSE OF DELEGATES

Top left reading left to right are WILLIAM Y. RIAL, MD President AMA. RICHARD D. EBERLE, MD President-Elect MSSNY. MILTON ROSENBERG, MD, President MSSNY. WILLIAM CLARK, MD Vice-Speaker MSSNY. JOHN L. CLOWE, MD Speaker MSSNY. EDWARD SIEGEL, MD Executive Vice-President MSSNY and VICTOR J. TOFANY, MD Secretary MSSNY.

Middle left to right are the Reference Committee on Reports of Officers. JOHN W. ABBUHL, MD Albany. JOHN A. RAMSDELL, MD Westchester. DAVID M. BENFORD, MD New York, Chairman. DATTATRAYA LANJEWAR, MD The Bronx. GEORGE W. LEWIS, MD Chautauqua.

Bottom left to right are the Recipients of the Redway Award. YUSUKE KANKE, PHD and REZA BASHEY, PHD. Also shown are ALFRED A. ANGRIST, MD Editor, NYSJM and Mrs. Yusuke Kanke.

Top right left to right. Addressing a caucus are JAMES M. FLANAGAN, MD Councilor, and JAMES H. COSGRIFF, JR, MD Councilor after meeting.

Middle left to right. At an informal conference are HAROLD E. BERSON, MD, PHILIP COHEN, MD, STANLEY FISHMAN, MD, and NORMAN BLACKMAN, MD.

Bottom left to right. The Reference Committee on Scientific Activities, Publications and Miscellaneous Affairs. GEORGE P. TILLEY, MD, Onandaga, JOSEPH A. PREZIO, MD, Erie, CHARLES R. SALAMONE, MD, Monroe, Chairman, STUART I. ORSHER, MD, New York City and RAY S. CRAMPTON, MD, Nassau.

Uniform requirements for manuscripts submitted to biomedical journals

In January 1978, a group of editors from some major biomedical journals published in English met in Vancouver, British Columbia, and decided on uniform technical requirements for manuscripts to be submitted to their journals. These requirements, including formats for bibliographic references, were published in three of the journals early in 1979. The Vancouver group evolved into the International Committee of Medical Journal Editors. At the October, 1981, meeting of the Committee the requirements were revised slightly and are presented as the main part of this document.

Over 150 journals have now agreed to receive manuscripts prepared in accordance with these requirements. It is important to emphasise what these requirements imply and what they do not.

First, if authors prepare their manuscripts in the style specified in these requirements, editors will not return manuscripts for changes in details of style. Even so, manuscripts may be altered by journals to conform with details of their own publication styles.

Thus, second, the requirements are instructions to authors on how to prepare manuscripts, not to editors on publication style.

Third, authors sending manuscripts to a participating journal should not try to prepare them in accordance with the individual publication style of that journal, but should follow the "Uniform requirements for manuscripts submitted to biomedical journals."

Nevertheless, authors *must also* follow the instructions to authors in the journal as to what topics are suitable for that journal and the types of papers that may be submitted (for example, original articles, reviews, case reports). In addition, the journal's instructions are likely to contain other requirements unique to that journal, such as number of copies of manuscripts, acceptable languages, length of articles, and approved abbreviations besides those listed in this document.

The cooperating journals are expected to state in their instructions to authors that their requirements are in accordance with "Uniform requirements for manuscripts submitted to biomedical journals."

This document will be revised at intervals. Inquiries and comments from Central and North America about these requirements should be sent to Edward J. Huth, MD, *Annals of Internal Medicine*, 4200 Pine Street, Philadelphia, PA 19104, USA; those from other regions should be sent to Stephen P. Lock, FRCP, *British Medical Journal*, British Medical Association, Tavistock Square, London WC1H 9JR, United Kingdom.

SUMMARY OF REQUIREMENTS

Type the manuscript double-spaced, including title page, abstract, text, acknowledgments, references, tables, and legends.

Each manuscript component should begin on a new page, in this sequence: title page; abstract and key words; text; acknowledgments; references; tables: each table, complete with title and footnotes, on a separate page; legends for illustrations.

Illustrations must be good quality, unmounted glossy prints usually 127 mm by 173 mm (5 by 7 in), but no larger than 203 mm by 254 mm (8 by 10 in).

Submit the required number of copies of manuscript and figures (see journal's instructions) in a heavy paper envelope. The submitted manuscript should be accompanied by a covering letter, as described under "Submission of manuscripts," and permissions to reproduce previously published materials or to use illustrations that may identify subjects.

Follow the journal's instructions for transfer of copyright. Authors should keep copies of everything submitted.

PRIOR AND DUPLICATE PUBLICATION

Most journals do not wish to consider for publication a paper on work that already has been reported in a published paper, or is described in a paper submitted or accepted for publication elsewhere. This policy does not usually preclude consideration of a manuscript that has been rejected by another journal or of a complete report that follows publication of a preliminary report, usually in the form of an abstract. *When submitting a manuscript, an author should always make a full statement to the editor about all submissions and prior reports that might be regarded as prior or duplicate publication of the same or very similar work. Copies of such material should be included with the submitted manuscript to help the editor decide how he or she will deal with the matter.*

PREPARATION OF MANUSCRIPT

Type the manuscript on white bond paper, 216 mm by 279 mm (8½ by 11 in) or ISO A4 (212 mm by 297 mm), with margins of at least 2.5 cm (1 in). Type only on one side of the paper. Use double spacing throughout, including title page, abstract, text, acknowledgments, references, tables, and legends for illustrations. Begin each of the following sections on separate pages: title page, abstract and key words, text, acknowledgments, references, individual tables, and legends. Number pages consecutively, beginning with the title page. Type the page number in the upper right-hand corner of each page.

Title Page

The title page should carry (*1*) *the title of the article, which should be concise but informative;* (2) a short running head or footline of no more than 40 characters (count letters and spaces) placed at the foot of the title page and identified; (3) first name, middle initial, and last name of each author, with highest academic degree(s); (4) name of

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International Committee of Medical Journal Editors Ole Harlem (*Norwegian Medical Journal*); Edward J. Huth (*Annals of Internal Medicine*); Stephen P. Lock (*British Medical Journal*); Ian Munro (*The Lancet*); Arnold Reiman (*The New England Journal of Medicine*); Povl Riis (*Danish Medical Bulletin*); Richard Robinson (*New Zealand Medical Journal*); Andrew Sherrington (*Canadian Medical Association Journal*); Therese Southgate (*Journal of the American Medical Association*); Ilka Vartiovaara (*Finnish Medical Journal*).

Portions of the sections under headings Prior and duplicate publication and Preparation of manuscript are italicized to call attention to frequently overlooked points.—Editor department(s) and institution(s) to which the work should be attributed; (5) disclaimers, if any; (6) name and address of author responsible for correspondence about the manuscript; (7) name and address of author to whom requests for reprints should be addressed, or statement that reprints will not be available from the author; (8) *the source(s) of support in the form of grants, equipment, drugs, or all of these.*

Abstract and Key Words

The second page should carry *an abstract of not more than 150 words.* The abstract should state the purposes of the study or investigation, basic procedures (study subjects or experimental animals; observational and analytic methods), main findings (give specific data and their statistical significance, if possible), and the principal conclusions. Emphasise new and important aspects of the study or observations. Use only approved abbreviations (see "Commonly used approved abbreviations" elsewhere in this document).

Below the abstract, provide, and identify as such, three to 10 key words or short phrases that will assist indexers in crossindexing your article and that may be published with the abstract. Use terms from the medical subject headings list from *Index Medicus* when possible.

Text

The text of observational and experimental articles is usually—but not necessarily—divided into sections with the headings: Introduction, Methods, Results, and Discussion. Long articles may need subheadings within some sections to clarify their content, especially the Results and Discussion sections. Other types of articles such as case reports, reviews, and editorials are likely to need other formats, and authors should consult individual journals for further guidance.

Introduction.—Clearly state the purpose of the article. Summarise the rationale for the study or observation. *Give only strictly pertinent references*, and do not review the subject extensively.

Methods.—Describe your selection of the observational or experimental subjects (patients or experimental animals, including controls) clearly. Identify the methods, apparatus (manufacturer's name and address in parentheses), and procedures in sufficient detail to allow other workers to reproduce the results. Give references to established methods, including statistical methods; provide references and brief descriptions for methods that have been published, but are not well known; describe new or substantially modified methods, give reasons for using them, and evaluate their limitations.

When reporting experiments on human subjects, indicate whether the procedures followed were in accordance with the ethical standards of the committee on human experimentation of the institution in which the experiments were done or in accordance with the Helsinki Declaration of 1975. When reporting experiments on animal subjects, indicate whether the institution's or the National Research Council's guide for the care and use of laboratory animals was followed. Identify precisely all drugs and chemicals used, including generic name(s), dosage(s), and route(s) of administration. Do not use patients' names, initials, or hospital numbers.

Include numbers of observations and the statistical significance of the findings when appropriate. Detailed statistical analyses, mathematical derivations, and the like may sometimes be suitably presented in the form of one or more appendixes.

Results.—Present your results in logical sequence in the text, tables, and illustrations. Do not repeat in the text all the data in the tables, illustrations, or both: emphasize or summarize only important observations.

Discussion.—Emphasise the new and important aspects of the study and conclusions that follow from them. *Do not repeat in detail data given in the Results section.* Include in the Discussion the implications of the findings and their limitations and relate the observations to other relevant studies. Link the conclusions with the goals of the study, but avoid unqualified statements and conclusions not completely supported by your data. Avoid claiming priority and alluding to work that has not been completed. State new hypotheses when warranted, but clearly label them as such. Recommendations, when appropriate, may be included.

Acknowledgements

Acknowledge only persons who have made substantive contributions to the study. Authors are responsible for obtaining written permission from everyone acknowledged by name, because readers may infer their endorsement of the data and conclusions.

References

Number references consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by arabic numerals (in parentheses). References cited *only* in tables or in legends to figures should be numbered in accordance with a sequence established by the first identification in the text of the particular table or illustration.

Use the style of the examples below, which are based on the formats used by the US National Library of Medicine in *Index Medicus.*

The titles of journals should be abbreviated according to the style used in *Index Medicus.* A list of abbreviated names of frequently cited journals is given near the end of this document; for others, consult the "List of the Journals Indexed," printed annually in the January issue of *Index Medicus.*

Try to avoid using abstracts as references; "unpublished observations" and "personal communications" may not be used as references, although references to written, not verbal, communications may be inserted (in parentheses) in the text. Include among the references manuscripts accepted but not yet published; designate the journal followed by "in press" (in parentheses). Information from manuscripts submitted but not yet accepted should be cited in the text as "unpublished observations" (in parentheses).

The references must be verified by the author(s) against the original documents.

Examples of correct forms of references are given below

Journals

1. *Standard journal article* (List all authors when six or less; when seven or more, list only first three and add *et al.*)
   You CH, Lee KY, Chey WY, Menguy R. Electrogastrographic study of patients with unexplained

nausea, bloating and vomiting. Gastroenterology 1980;79:311–4.

2. *Corporate author*
   The Royal Marsden Hospital Bone-Marrow Transplantation Team. Failure of syngeneic bone-marrow graft without preconditioning in post-hepatitis marrow aplasia. Lancet 1977;2: 242–4.
3. *No author given*
   Anonymous. Coffee drinking and cancer of the pancreas [Editorial]. Br Med J 1981;283:628.
4. *Journal supplement*
   Mastri AR. Neuropathy of diabetic neurogenic bladder. Ann Intern Med 1980;92(2 Pt 2):316–8.
   Frumin AM, Nussbaum J, Esposito M. Functional asplenia: demonstration of splenic activity by bone marrow scan [Abstract]. Blood 1979;54(suppl 1):26a.
5. *Journal paginated by issue*
   Seaman WB. The case of the pancreatic pseudocyst. Hosp Pract 1981;16(Sep):24–5.

Books and other monographs

6. *Personal author(s)*
   Eisen HN. Immunology: an introduction to molecular and cellular principles of the immune response. 5th ed. New York: Harper and Row, 1974:406.
7. *Editor, compiler, chairman as author*
   Dausser J, Colombani J, eds. Histocompatibility testing 1972. Copenhagen: Munksgaard, 1973: 12–8.
8. *Chapter in a book*
   Weinstein L, Swartz MN. Pathogenic properties of invading microorganisms. In: Sodeman WA Jr, Sodeman WA, eds. Pathologic physiology: mechanisms of disease. Philadelphia: WB Saunders, 1974;457–72.
9. *Published proceedings paper*
   DuPont B. Bone marrow transplantation in severe combined immunodeficiency with an unrelated MLC compatible donor. In: White HJ, Smith R, eds. Proceedings of the third annual meeting of the International Society for Experimental Hematology. Houston: International Society for Experimental Hematology, 1974:44–6.
10. *Monograph in a series*
    Hunninghake GW, Gadek JE, Szapiel SV, et al. The human alveolar macrophage. In: Harris CC, ed. Cultured human cells and tissues in biomedical research. New York: Academic Press, 1980:54–6. (Stoner GD, ed. Methods and perspectives in cell biology; vol 1).
11. *Agency publication*
    Ranofsky AL. Surgical operations in short-stay hospitals: United States—1975. Hyattsville, Maryland: National Center for Health Statistics, 1978; DHEW publication no. (PHS)78-1785. (Vital and health statistics; series 13; no 34).
12. *Dissertations and theses*
    Cairns RB. Infrared spectroscopic studies of solid oxygen. Berkeley, California: University of California, 1965. 156 p. Dissertation.
13. *Newspaper article*
    Shafter RA. Advances in chemistry are starting to unlock mysteries of the brain: discoveries could help cure alcoholism and insomnia, explain mental illness. How the messengers work. Wall Street Journal 1977 Aug 12:1(col 1), 10(col 1).
14. *Magazine article*
    Roueché B. Annals of medicine: the Santa Claus culture. The New Yorker 1971 Sep 4:66–81.

Tables

Type each table on a separate sheet; remember to double space. Do not submit tables as photographs. Number tables consecutively and supply a brief title for each. Give each column a short or abbreviated heading. Place explanatory matter in footnotes, not in the heading. Explain in footnotes all non-standard abbreviations that are used in each table. For footnotes, use the following symbols, in this sequence: *, †, ‡, §, ‖, ¶, **, †† . . .

Identify statistical measures of variations such as SD and SEM.

Do not use internal horizontal and vertical rules.

Cite each table in the text in consecutive order.

If you use data from another published or unpublished source, obtain permission and acknowledge fully.

The use of too many tables in relation to the length of the text may produce difficulties in the layout of pages. Examine issues of the journal to which you plan to submit your manuscript to estimate how many tables can be used per 1000 words of text.

The editor on accepting a manuscript may recommend that additional tables containing important back-up data too extensive to publish be deposited with the National Auxiliary Publications Service or made available by the author(s). In that event, an appropriate statement will be added to the text. Submit such tables for consideration with the manuscript.

Illustrations

Submit the required number of complete sets of figures. Figures should be professionally drawn and photographed; freehand or typewritten lettering is unacceptable. Instead of *original* drawings, roentgenograms, and other material, send sharp, glossy black-and-white photographic prints, usually 127 mm by 173 mm (5 by 7 in), but no larger than 203 mm by 254 mm (8 by 10 in). Letters, numbers, and symbols should be clear and even throughout, and of sufficient size that, when reduced for publication, each item will still be legible. Titles and detailed explanations belong in the legends for illustrations, not on the illustrations themselves.

Each figure should have a label pasted on its back indicating the number of the figure, the names of the authors, and the top of the figure. Do not write on the back of the figures, mount them on cardboard, or scratch or mar them using paper clips. Do not bend figures.

Photomicrographs must have internal scale markers. Symbols, arrows, or letters used in the photomicrographs should contrast with the background.

If photographs of persons are used, either the subjects must not be identifiable or their pictures must be accompanied by written permission to use the photograph.

Cite each figure in the text in consecutive order. If a figure has been published, acknowledge the original source and submit written permission from the copyright holder to reproduce the material. Permission is required, *regardless of authorship or publisher*, except for documents in the public domain.

For illustrations in colour, supply colour negatives or positive transparencies and, when necessary, accompanying drawings marked to indicate the region to be reproduced; in addition, send two positive colour prints to assist editors in making recommendations. Some journals publish illustrations in colour only if the author pays for the extra cost.

Legends for Illustrations

Type legends for illustrations double spaced, starting on a separate page, with arabic numerals corresponding to the illustrations. When symbols, arrows, numbers, or letters are used to identify parts of the illustrations, identify and explain each one clearly in the legend. Explain internal scale and identify method of staining in photomicrographs.

UNITS OF MEASUREMENT

Measurements of length, height, weight, and volume should be reported in metric units (metre, kilogram, litre) or their decimal multiples.

Temperatures should be given in degrees Celsius. Blood pressures should be given in millimetres of mercury. Other measurements should be reported in the units in which they were made.

In most countries, the International System of Units (SI) is standard or is becoming so. Journals may use these units or convert them to other units according to their editorial policies. Editors may request that alternative units (SI or non-SI units) be added by the author before publication of the paper.

SUBMISSION OF MANUSCRIPTS

Mail the required number of manuscript copies in a heavy paper envelope, enclosing the manuscript copies and figures in cardboard, if necessary, to prevent bending of photographs during mail handling. Place photographs and transparencies in a separate heavy paper envelope.

Manuscripts should be accompanied by a covering letter from the author who will be responsible for correspondence regarding the manuscript. The covering letter should contain a statement that the manuscript has been seen and approved by all authors. The letter should give any additional information that may be helpful to the editor, such as the type of article the manuscript represents in the particular journal, information on prior or duplicate publication or submission of any part of the work, and whether the author(s) will be willing to meet the cost of reproducing colour illustrations. Include copies of any permissions needed to reproduce published material or to use illustrations of identifiable subjects.

ABBREVIATIONS AND SYMBOLS

Use only standard abbreviations (see below for list of commonly used abbreviations). Consult the following sources for additional abbreviations: (1) CBE Style Manual Committee. Council of Biology Editors style manual: a guide for authors, editors, and publishers in the biological sciences. 4th ed. Arlington: Council of Biology Editors, 1978; and (2) O'Connor M, Woodford FP. Writing scientific papers in English: an ELSE-Ciba Foundation guide for authors. Amsterdam: Elsevier-Excerpta Medica, 1975. Avoid abbreviations in the title. The full term for which an abbreviation stands should precede its first use in the text unless it is a standard unit of measurement.

COMMONLY USED APPROVED ABBREVIATIONS

Standard units of measurement

ampere	A
angström	Å
barn	b
candela	cd
coulomb	C
counts per minute	cpm
counts per second	cps
curie	Ci
degree Celsius	°C
disintegration per minute	dpm
disintegration per second	dps
electronvolt	eV
equivalent	Eq
farad	F
gauss	G
gram	g
henry	H
hertz	Hz
hour	h
international unit	IU
joule	J
kelvin	K
kilogram	kg
liter, litre	l or L
meter, metre	m
methyl	Me
Michaelis constant	K_m
negative logarithm of hydrogen ion activity	pH
partial pressure of CO_2	PCO_2
partial pressure of O_2	PO_2
per	/
per cent	%
radiation (ionising, absorbed dose)	rad
respiratory quotient	RQ
specific gravity	sp gr
standard atmosphere	atm
standard temperature and pressure	STP
ultraviolet	uv
volume	vol
volume ratio (volume per volume)	vol/vol
weight	wt
weight per volume	wt/vol
weight ratio (weight per weight)	wt/wt
minute	min
molar	*M*
mole	mol
newton	N
normal (concentration)	N
ohm	Ω
osmol	osmol
pascal	Pa
revolutions per minute	rpm
second	s
square centimetre	cm^2
volt	V
watt	W
week	wk
year	yr

Combining prefixes

tera-	(10^{12})	T
giga-	(10^{9})	G
mega-	(10^{6})	M
kilo-	(10^{3})	k
hecto-	(10^{2})	h
deca-	(10^{1})	da
deci-	(10^{-1})	d
centi-	(10^{-2})	c
milli-	(10^{-3})	m
micro-	(10^{-6})	μ
nano-	(10^{-9})	n
pico-	(10^{-12})	p
femto-	(10^{-15})	f
atto-	(10^{-18})	a

Statistical terms

correlation coefficient	r
degrees of freedom	df
mean	$\bar{x}$
not significant	NS
number of observations	n
probability	p
standard deviation	SD
standard error of the mean	SEM
"Student's" *t*-test	*t* test
variance ratio	F

Others

adenosinediphosphatase	ADPase
adenosine 5′-diphosphate (adenosine diphosphate)	ADP
adenosine 5′-monophosphate (adenosine monophosphate, adenylic acid)	AMP

adenosine triphosphatase	ATPase
adenosine 5′-triphosphate (adenosine triphosphate)	ATP
adrenocorticotropic hormone (adrenocorticotropin)	ACTH
bacille Calmette-Guérin	BCG
basal metabolic rate	BMR
body temperature, pressure, and saturated	BPTS
central nervous system	CNS
coenzyme A	coA
deoxyribonucleic acid (deoxyribonucleate)	DNA
dihydroxyphenethylamine	dopamine
electrocardiogram	ECG
electroencephalogram	EEG
enteric cytopathogenic human orphan (virus)	ECHO
ethyl	Et
ethylenediaminetetraacetate	EDTA
gas-liquid chromatography	GLC
guanosine 5′-monophosphate (guanosine monophosphate, guanylic acid)	GMP
haemoglobin	Hb
logarithm (to base 10; common logarithm)	log
logarithm, natural	ln

ABBREVIATIONS OF NAMES OF FREQUENTLY CITED JOURNALS; PARTICIPATING JOURNALS

The journals listed below by abbreviated title are those covered by *Abridged Index Medicus* and additional journals participating in the Uniform Requirements agreement. Participating journals are mared by an asterisk.

Acta Paediatr Scand*
Activox*
AJR*
Am Fam Physician*
Am Heart J
Am J Cardiol*
Am J Clin Nutr*
Am J Clin Pathol
Am J Dis Child*
Am J Epidemiol*
Am J Hosp Pharm*
Am J Hum Genet*
Am J Med*
Am J Med Sci
Am J Nurs
Am J Obstet Gynecol
Am J Ophthalmol
Am J Pathol*
Am J Phys Med
Am J Psychiatry*
Am J Public Health*
Am J Surg*
Am J Trop Med Hyg
Am Rev Respir Dis*
Am Surg*
Anaesthesia*
Anaesth Intensive Care*
Anesth Analg (Cleve)*
Anesthesiology
Ann Clin Biochem*
Ann Clin Lab Sci*
Ann Intern Med*
Ann Otol Rhinol Laryngol*
Ann R Coll Phys Surg Can*
Ann R Coll Surg Engl*
Ann Rheum Dis*
Ann Surg*
Ann Thorac Surg*
Ann Trop Paediatr*
Arch Dermatol*
Arch Dis Child*
Arch Environ Health
Arch Gen Psychiatry*
Arch Intern Med*
Arch Invest Med (Mex)*
Arch Neurol*
Arch Ophthalmol*
Arch Otolaryngol*
Arch Pathol Lab Med*
Arch Phys Med Rehabil
Arch Surg*
Ariz Med*
Arteriosclerosis*
Arthritis Rheum
Aust Fam Physician*
Aust J Derm*
Aust J Hosp Pharm*
Aust J Ophthalmol*
Aust NZ J Med*
Aust NZ J Surg*
Aust Paediatr J*
Bibl Laeger*
Blood
Bol Med Hosp Infant Mex*
Bordeaux Med*
Brain
Brain Develop*
Br Heart J*
Br Homeopath J*
Br J Ind Med*
Br J Obstet Gynaecol
Br J Ophthalmol*
Br J Pain*
Br J Radiol
Br J Surg*
Br J Vener Dis*
Br Med J*
Bull Med Libr Assoc*
Bull WHO*
CA
Cancer
Can J Public Health*
Can J Surg*
Can Med Assoc J*
Cardiovasc Res*
Cephalalgia*
Chest*
Chron Dis Can*
Circulation*
Clin Chem Acta*
Clin Invest Med*
Clin Orthop
Clin Pediatr (Phila)*
Clin Pharmacol Ther
Clin Prevent Dent*
Clin Toxicol
Community Med*
Crit Care Med
Cuad Hosp Clin*
Curr Concepts Hyperten Cardiovasc Dis*
Curr Probl Surg
Dan Med Bull*
Diabetes
Dig Dis Sci
DM
Drug Intell Clin Pharm*
Endocrinology
Eur Heart J*
Eur J Cancer*
Eur J Clin Invest*
Eur J Resp Dis*
Eur J Rheum Inflam*
Fam Med Teacher*
Gastroenterology*
Gastrointest Endosc*
Geriatrics*
Gut*
Hawaii Med J*
Heart Lung
Hospitals
Hosp Pharm*
Hosp Pract
Iatriki*
Indian J Dermatol Venereol Leprol*
Int J Epidemiol*
Int J Pediatr Nephrol*
Int Rehab Med*
J Allergy Clin Immunol*
JAMA*
J Am Diet Assoc
J Bone Joint Surg (Am)
J Bone Joint Surg (Br)
J Cardiovasc Surg*
J Chronic Dis*
J Clin Endocrinol Metab
J Clin Gastroenterol*
J Clin Invest
J Clin Pathol*
J Epidemiol Community Health*
J Fac Med (Baghdad)*
J Fam Pract
J Gerontol
J Hong Kong Med Technol Assoc*
J Immunol
J Irish Coll Physicians Surg*
J Infect Dis
J Lab Clin Med*
J Laryngol Otol
J Manipul Physiol Therap*
J Matern Child Health*
J Med Ethic
J Med Educ
J Med Genet*
J Natl Cancer Inst*
J Nephrol*
J Nerv Ment Dis
J Neurol Neurosurg Psychiatry*
J Neurosurg
J Nucl Med Technol*
J Nurs Adm
J Oral Surg
J Pediatr
J Psychosom Res*
J R Army Med Corps*
J R Coll Physicians Lond*
J R Coll Surg Edinb*
J R Nav Med Ser*
J Thorac Cardiovasc Surg
J Trauma
J Urol
J Vivekananda Inst Med Sci*
Lakartidningen*
Lancet*
Lepr Rev*
Malay J Pathol*
Matern Child Health*
Mayo Clin Proc
Med Care*
Med Clin (Barc)*
Med Clin North Am
Medicine (Baltimore)
Medicine (Oxford)*
Med J Aust*
Med Lab Sci*
Med Lett Drugs Ther
Med Pediatr Oncol*
Mt Sinai J Med*
N Carolina Med J*
N Doct*
Ned Tijdschr Geneeskd*
N Engl J Med*
Neurology (NY)*
Newfoundland Med Assoc J*
Niger Med J*
Nord Med*
No To Hattatsu*
Nurs Clin North Am
Nursing*
Nurs Outlook
Nurs Res

NY State J Med*
NZ Fam Physician*
NZ Med J*
NZ J Med Lab Technol*
Obstet Gynecol
Ophthalmology*
Orthop Clin North Am
Orthopt J Aust*
Otolaryngol Head Neck Surg*
Papua New Guinea Med J*
Pathology*
Pediatr Clin North Am
Pediatrics
Periton Dialys Bull*
Pharmacotherapy*
Physician Sports Med*
Phys Ther
Plast Reconstr Surg
PM*
Postgrad Doct-Africa*
Postgrad Doct-Asia*
Postgrad Doct-Middle East*
Postgrad Med*
Postgrad Med J*
Prog Cardiovasc Dis
Public Health*
Public Health Pap*
Public Health Rep
Quart J Med*
Radiol Clin North Am
Radiology*
Rev Esp Rheumatol*
Rev Med Chil*
Rev Med IMSS*
Rheumatol Rehabil
S Afr Med J*
Scand J Respir Dis*
Sex Transm Dis*
South Med J*
Sri Lankan Fam Physician*
Surg Clin North Am
Surgery
Surg Gynecol Obstet
Swed Med J*
Thorax*
Thromb Haemost*
Tidsskr Nor Laegeforen*
Transfusion*
Trop Gastroenterol*
Ugeskr Laeger*
Ulster Med J*
Undersea Biomed Res*
Urol Clin North Am
Vet Radiol*
WHO Chron*
WHO Monogr Ser*
WHO Tech Rep Ser*
World Health Stat Q*
World Med J*
Yale J Biol Med*

BOOK REVIEWS

A new book review section is being inaugurated with this issue of the *Journal*. Although book reviews have been a regular feature of the *Journal* for many years, the new section possesses a number of features that distinguish it from its predecessors.

Book reviews will be printed as a contiguous whole, and not interspersed throughout the *Journal* as before. Some books will be sent to two reviewers and both reviews will be printed simultaneously. This is a new and unique feature aimed at partially addressing long standing and legitimate author and publisher complaints that some reviews represent idiosyncratic bias and not reasoned opinion. The *Journal* will also publish letters in its letters section written in response to book reviews.

Another new feature will be essay-reviews of books. These will be of greater length than reviews and will include comments on the subject matter of books in addition to reviews.

Readers are invited to submit reviews of new books. Prior to the submission of such reviews, however, you should send a letter of intent, describing the book (author, title, publisher and year of publication), to Pascal James Imperato, MD, Deputy Editor, New York State Journal of Medicine, 420 Lakeville Road, P.O. Box 5404, Lake Success, New York 11042. On receipt of this letter, instructions will be sent to you. If the book in question does not appear in the *Journal's* Books Received list, we may ask that you send it to us with your review. The book will be returned to you. The *Journal* reserves the right of final decision on publication of all book reviews submitted to it and the right to copy-edit all reviews.

All books sent to the *Journal* for review will be acknowledged in a Books Received list, published at appropriate intervals. As in the past, this listing discharges the *Journal's* responsibility to the senders of the books. Ordinarily, books of special interest to readers will be selected for review from this list.

We welcome comments from readers, authors, and publishers about the Book Review section.

INTERNATIONAL PERSPECTIVES ON NEGLECTED SEXUALLY TRANSMITTED DISEASES

Edited by King K. Holmes, MD and Per-Anders Mårdh, MD. 336 pp., illustrated. New York, McGraw Hill, 1983. $45.00.

Every physician who sees patients with sexually transmitted diseases knows how difficult it is to find concise, in depth, practical information on the so-called minor sexually transmitted diseases. Drs. King Holmes and Per-Anders Mårdh, the editors of this volume, are two distinguished clinicians and researchers in the field of sexually transmitted diseases who have appreciated this important problem. Correctly characterizing these diseases as "neglected," they have assembled a group of internationally recognized experts to provide current data which would be appropriate for both basic scientists and clinicians. In the introduction to their book, the editors point out that factors such as changing sexual behavior, an increasingly mobile population, and the more widespread use of contraceptives have all contributed in part to increasing the spectrum of diseases that are sexually transmitted. It is, therefore, particularly important for physicians to be familiar with these clinical syndromes.

The first part of this book discusses individual agents such as *Chlamydia trachomatis*, *Ureaplasma urealyticum*, *Mycoplasma hominis*, hepatitis B, herpes simplex, cytomegalovirus, *Haemophilus ducreyi*, *Gardnerella* vaginitis, *Trichomonas vaginalis*, other sexually transmitted protozoan infections, genital warts and ectoparasites. Each agent is discussed in terms of biologic characteristics, pathophysiology, epidemiology, clinical spectrum, diagnosis and treatment. These chapters synthesize a large quantity of relevant information, are easily readable and adequately referenced. The only minor criticism one could make is that "other protozoan diseases" which appears at the end of the discussion on Trichomonas should have been presented in more depth than the half page allotted to this important subject.

The second part of the book examines syndromes and complications. Topics include urethritis, epididymitis and prostatitis in men; vaginitis, cervicitis and urethritis in women; *Lymphogranuloma venereum*, Donovanosis, genital ulcers; pelvic inflammatory disease and epidemiologic aspects of infertility. This section is very important because it integrates a large amount of clinical and pathophysiologic information in a way that effectively demonstrates the complex variables that interrelate in the differential diagnosis of clinical syndromes. In areas that will need more research for further clarification, the sometimes conflicting available data is presented objectively and fairly. The book concludes with a practical section on laboratory services that are currently available.

This is an extremely useful book for the experienced specialist, as well as the general physician who sees an occasional patient with a sexually transmitted disease. It contains authoritative, effectively presented material that is well referenced and easily retrievable. It is a valuable, concise reference for current information on research, differential diagnosis, and clinical management.

LEWIS M. DRUSIN, MD
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— Cornell Medical Center
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COLOR ATLAS OF CHEST TRAUMA AND ASSOCIATED INJURIES

Vol 1. Edited by Augustin Besson, MD and Frederic Saegesser, MD. 384 pp., illustrated. Oradell, NJ, Medical Economics Books, 1982. $87.50.

This is an excellent reference book that reviews in an organized manner and deals in great detail with the diagnosis and management of chest injuries and related trauma.

The authors successfully attempt to acquaint the reader with a broad knowledge of diagnosis and treatment of a wide variety of both common and uncommon injuries to the chest. This volume deals with acute and subacute care of penetrating and nonpenetrating trauma to the chest and surrounding organs with a thorough discussion of diagnosis and early and late management of the above injuries. Management is presented in a step-by-step detailed fashion that will be appreciated by general and thoracic surgeons alike.

Enhancing each chapter are abundant, carefully selected, well reproduced graphic pertinent illustrations of each type of chest injury and associated trauma to other structures or systems.

The relevancy of this work can be appreciated when one considers that in the United States today accidents are the leading cause of death in the under thirty-seven year age group, and third ranked overall, surpassed only by cardiovascular disease and cancer. Chest trauma accounts for approximately twenty-five percent of all accidental deaths occurring within minutes to several hours following injury and in approximately fifty percent of these deaths, chest trauma plays a major role.

This timely atlas is an important reference in this high velocity and violent era where trauma centers are becoming a significant addition to many health care facilities in large urban areas and thereby creating the "trauma specialist."

As a thoracic surgeon actively involved with great numbers of chest trauma patients, this reader found the *Color Atlas of Chest Trauma and Associated Injuries, Volume I* extraordinarily interesting and informative and eagerly awaits Volume II which deals with trauma to the trachea, bronchi, heart, great vessels, diaphragm and esophagus which will be published separately.

F. E. LAJAM, MD
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COLON: STRUCTURE AND FUNCTION

Edited by Luis Bustos-Fernandez, MD. 308 pp., illustrated. New York, Plenum Medical Book Company, 1983. $39.50.

This is generally an excellent review of current knowledge of structure and function of the normal colon. Though the book was published in 1983, its authors include references up to 1982, making it unusually up to date as a reference work. The structural components addressed, each with its own chapter, include anatomy, colonic mucus, regulatory peptides, nerves and circulation. Function or aspects of the colon that have functional implications include the chapter headings, absorption and secretion of electrolytes, immunology, bacteriology, storage and propulsion, bulk agents (including fiber), colonic adaptation, and drugs. The authors are all recognized experts who have contributed to knowledge in their respective areas.

The book is attractively bound and printed; illustrations and photographs are of high quality. Each chapter has numerous subheadings which allow a subject to be easily located.

In general, the quality is an even and high level. A few chapters are not as informative as others. Physiology of mucus is vaguely covered. Immunology includes much information derived from the small intestine, perhaps because so little is known of the colon. Enterohepatic circulation seems misplaced in a book on the colon; drugs and the colon repeats much of what is covered in absorption and secretion. While the relationship of colon cancer to fiber is controversial, it is not covered at all in the chapter on bulk agents. All of the other chapters are well organized and referenced and present a sophisticated view of other topics. Hormones, bacteria, nerves, blood vessels, mucus and electrolyte fluxes are described in great detail.

This book should appeal to anyone who wants to learn what is currently known about normal colonic structure and function. This includes physiologists, researchers and clinicians involved in the teaching of gastroenterology.

CHARLES D. GERSON, MD
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PREVENTION OF KIDNEY DISEASE AND LONG-TERM SURVIVAL

Edited by M. M. Avram, MD. 324 pp., illustrated. New York, Plenum Medical Book Company, 1982. $35.00.

Dr. Avram, an established and highly respected nephrologist, has organized and edited the proceedings of a unique meeting for the benefit of all concerned with prevention of kidney disease. Emphasis is on the facts about and implications of long term survival of patients with chronic renal failure and uremia. Physiologists, psychiatrists, clinicians, nutritionists as well as kidney patients consider prevention which is low cost, nonmorbid and uremia therapy which is very high cost and morbid. Various solutions are explored. The base is analysis of uremic patients in chronic renal failure who have lived ≥ 10 years beyond their predicted life expectancy. The combination of timely subjects well-written by outstanding workers in the field is a wholesome unity, consistently oriented toward the unique and worthwhile theme: prevention of kidney disease. Dr. Avram obviously has succeeded in his attempt to provide a forum for thorough discussion of this fascinating subject. A bonus feature is his summary statement at the beginning of each section. Subjects presented are:

I. Nutrition and Divalent Ion in Retarding Progression of Chronic Renal Failure (low protein diets, phosphate, and acidosis);

II. Glomerular Damage and its Prevention (hyperfiltration theory and hypertension);

III. Genesis and Prevention of Diabetic Nephropathy: New Concepts (hyperglycemia, hemodynamics);

IV. Use or Misuse of Pharmacologic Agents in Kidney Disease (prevention of glomerular damage, CRF due to toxins);

V. New Insights into Complications of Uremia (autonomic nervous system, uremic bone disease);

VI. Uremic Therapy and the Long-Term Dialysis Patient: Natural History and Clinical, Psychological, and Economic Characteristics of the Over-Decade Frontier (general treatment and hemodialysis for 10–20 years; hypotension-cardiovascular, hematologic, gastrointestinal, pulmonary, musculoskeletal and psychological aspects; NIH funding)

VII. The Transplantation Alternative (long term survival, T cell activation).

This book is attractively assembled, with easy to read type and clear figures, which include histological sections, graphs, and photographs of people and facilities. Detailed author and subject indexes facilitate access to the contents.

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Miami, Florida

* * *

This volume is an excellent summary of selected aspects of the current "state of the art" in the prevention and management of chronic renal disease. As a multi-authored volume, the approach is varied and the quality of the chapters variable. Nevertheless, the editor, with a long personal experience in this field, succeeds in establishing a continuous theme which serves to hold the volume together nicely.

The initial sections of the book, dealing with dietary considerations in the management of chronic renal disease, and with some new advances in the pathogenesis of renal failure, are written authoritatively and concisely. The following section consists of two chapters which are both excellent summaries. The use of pharmacologic agents to treat glomerular disease is discussed in the first part and the second deals with toxic nephropathies.

The remainder of the book (189 pages) is devoted to various aspects of the uremic syndrome and its therapy. There are sections devoted to autononic neuropathy, azotemic osteodystrophy, hematologic abnormalities, vascular complications, and musculoskeletal disease as they occur in chronic renal disease. The book ends with three sections on transplantation. The first is a presentation of long-term survivors and the clinical problems affecting that group. The second is a brief summary of the changing outlook and management of the transplant patient. The last is an elegant discussion of biochemical aspects of T-cell activation, an area that will undoubtedly be of major significance as the problems of rejection become unraveled.

This book is a nice addition to the library of all students of nephrology, particularly clinicians and investigators with an interest in chronic renal disease.

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POWER AND THE PROFESSION OF OBSTETRICS

By William R. Arney. 230 pp., illustrated. Chicago, University of Chicago Press, 1982. $25.00.

"Power and the Profession of Obstetrics" is not a book about "the practices of all obstetricians, nor is it about women's experience at the hands of obstetricians." It is not a textbook, but rather is a "third kind of history of the profession." It is a book in which the author tries to expose the development of the profession as a whole as it is "reflected in the profession's literature" with an attitude that it is not to be construed as pro-obstetrics or anti-obstetrics.

There are two parts to the book. The first part, "Forming the Profession," examines how the profession expanded itself to include childbirth and how it maintained it as the exclusive domain of the profession. Part two, "Reforming the Profession," delves into the changes in concepts, new technology, and social organization of obstetricians beginning with the end of World War II and up to the present.

The decline of midwifery and the "female midwife" is described as an evolutionary process in which political maneuvering, public and private patronage, and public change of alliance exhibited a great influence.

Unfortunately the author tries to indicate, as one problem of the obstetrician, the attempt to extend its influence and "solidify the mandate" it had written for itself to keep "birth as pathology" and require the need for intervention in childbirth by the use of forceps, episiotomy, birthing position, induction of labor, etc. As an obstetrician I most whole-heartedly disagree with this view.

There is an unbiased presentation of trends in modern obstetrics and newer technology. Fetal monitoring, genetics, amniocentesis, out of hospital births, bending regionalization of perinatal care, and ethics are but a few of the topics reviewed from current medical literature. In addition, there is an excellent bibliography containing notes by the author.

In summary, the book is a study on the exploration of the "deployment and tranformation of power" between women and obstetricians. However, it does leave one with a brighter note that childbirth must be a joint adventure between the physician and the pregnant woman.

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PSYCHIATRIC ADMINISTRATION. A COMPREHENSIVE TEXT FOR THE CLINICIAN EXECUTIVE

Edited by John A. Talbott, MD and Seymour R. Kapson, MD. 410 pp., illustrated. New York, Grune & Stratton, 1983. $38.50.

Seldom does one encounter a book which is as well planned, comprehensive, and well written as this one. The authors of each chapter were well chosen for their expertise and ability to present technical material in a clear and comprehensive fashion.

The book is divided into six sections: Historical and Organizational Perspectives, Psychiatric Services, Organizational and Administrative Theory, Leadership and Training, Facility Management, Budget and Finance and Law and Psychiatry making this virtually a concise encyclopedia on psychiatric administration.

It is not a "how to" book but sets forth important principles as guides to thinking about many administrative issues, based upon the authors' experiences using examples which can be flexibly adapted to one's own particular situation.

The editors have deliberately chosen to permit some minimal redundancy recognizing that some readers may tend to limit themselves to chapters specific to their immediate interests. However, this reviewer believes that anyone who reads part of this book will eventually read it all. Actually it is of value not only to clinician-executives but also to all psychiatrists regardless of their subspecialty for it contains important information which will help one to understand future trends and developments.

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HARRISON'S PRINCIPLES OF INTERNAL MEDICINE

Tenth edition. Edited by R. G. Petersdorf, MD, R. A. Adams, MD, E. Braunwald, MD, K. J. Isselbacher, MD, J. B. Martin, MD, and J. D. Wilson, MD. 2,399 pp. New York, McGraw-Hill Book Company, 1983. $70.00 (one volume version) $85.00 (two volume version).

Over the past three decades *Principles of Internal Medicine* has become one of the major standard texts of its kind. In large measure this has come about because the editors and authors have successfully kept pace with the kaleidoscopic advances that have characterized medicine during this period. The rapid advance of diagnostic and therapeutic modalities and the accumulation of knowledge that results in changes in basic concepts about disease processes are factors leading to speedy textbook obsolescence. The editors of this book, however, have effectively dealt with this problem through frequent revisions by leading specialists on the cutting edge of medical advances coupled with the periodic publication of *updates* (four followed the ninth edition).

This edition retains the valuable preliminary sections dealing with an introduction to clinical medicine, the cardinal manifestations of disease and biologic considerations in the approach to clinical medicine. As with the ninth edition a *Pre-Test Self-Assessment and Review* will also be available enabling users to assess their medical knowledge. The *Pre-Test* is accompanied by a multiple choice examination that may be taken for CME credit.

Not all sections and chapters of the book have been either extensively revised or rewritten. However most have been updated and include numerous 1981, 1982 and even 1983 references. A number of the chapters in the section on gastroenterology have been extensively revised, two new chapters on bradyarrhythmias and tachyarrhythmias have been added to the cardiology section, and new chapters have been added to the section on disorders of the nervous system. New chapters appear in the section on genetic disorders, including one on the HLA system and a discussion of the implications of recombinant DNA technology for medicine. The section on metabolic pathways has been significantly altered to include newer concepts emerging from molecular biological research. Special attention is given to cyclic AMP which serves as an important intracellular second messenger for hormones.

The infectious diseases are well covered and a new chapter is included in this general area on Pittsburgh pneumonia and other infections due to more recently discovered *Legionella* species. Few hostages are left to chance in the section on protozoal and helminthic infections. There are two splendid chapters in this section — The Diagnosis and Therapy of Parasitic Diseases and The Immunology of Parasites. The latter covers some of the exciting findings produced by molecular biologists working with parasites. In general therapies for parasitic diseases have been updated and are accurate. The newer drugs that have revolutionized the management of schistosomiasis are discussed clearly and in detail and the management of chloroquine resistant *Plasmodium falciparum* infections is succinctly outlined. Inevitable minor flaws are present as when diodohydroxyquin is recommended for the management of asymptomatic intestinal carriers of *Entamoeba histolytica*. This drug can no longer be purchased in the United States except in huge bulk and is thus unavailable to most physicians and patients. The recommendation that personal protection against African trypanosomiasis is best achieved by the use of repellents and protective clothing is a derivative misconception not based on field experience. Tsetse flies are quite capable of penetrating even thick clothing and in hot arid tsetse zones insect repellents rapidly evaporate and lose their effectiveness.

Closer to home, it is erroneously stated that measles vaccines have not been associated with hypersensitivity reactions even in egg sensitive individuals. However, anaphylaxis following measles immunization has been reported (*Afrique Medicale*, 69, 4:301-303, 1969; *MMWR*, 33:218-231, 1982). Occasional errors of this kind appear in other sections of the book, but none of them are serious in nature.

The editors have made special efforts to include detailed discussions of newer concepts and disease processes. Among these are Acquired Immunodeficiency Syndrome (AIDS) and Toxic Shock Syndrome (TSS). Both of these subjects are treated in sufficient detail and will prove useful to many users of the text.

As medical knowledge has expanded, so too has the size of most medical texts. The editors and publisher of *Harrison's* have made special efforts to keep the book's size within reasonable bounds while simultaneously providing access to a greatly enlarged body of knowledge. They have done this through succinct discussions coupled with important references that themselves provide not only expanded treatment of given subjects but also extensive references of their own. The availability of a two volume version of the book, as with previous editions, answers the portability problem of special interest to medical students and house staff.

In summary, the editors and publisher of the tenth edition of *Harrison's* have maintained the text's historical level of excellence. It is one of the finest textbooks of internal medicine in print, up to date, authoritatively authored, clearly written and superbly referenced. It is highly recommended to a wide readership, including medical students, house officers and practicing physicians.

PASCAL JAMES IMPERATO, MD
Deputy Editor

BOOKS RECEIVED

GASTROENTEROLOGY

Colon: Structure and Function. (Topics in Gastroenterology.) Edited by Luis Bustos-Fernandez, MD. 308 pp., illustrated. New York, Plenum Medical Book Company, 1983. $39.50 (hardcover).

MEDICINE

Harrison's Principles of Internal Medicine. Tenth edition. Edited by R. G. Petersdorf, MD, Raymond D. Adams, MD, Eugene Braunwald, MD, Kurt J. Isselbacher, MD, J. B. Martin, MD, and J. D. Wilson, MD. 2399 pp. New York, McGraw-Hill Book Company, 1983. One volume version $70.00 (hardcover). Two volume version $85.00 (hardcover).

NEPHROLOGY

Immune Mechanisms in Renal Disease. Edited by Nancy B. Cummings, MD, Alfred F. Michael, MD, and Curtis B. Wilson, MD. 564 pp., illustrated. New York, Plenum Medical Book Company, 1983. $65.00 (hardcover).

Prevention of Kidney Disease and Long-Term Survival. Edited by M. M. Avram, MD. 324 pp., illustrated. New York, Plenum Medical Book Company, 1982. $35.00 (hardcover).

The Kidney and Body Fluids in Health and Disease. Edited by Saulo Klahr, MD. 593 pp., illustrated. New York, Plenum Medical Book Company, 1983. $59.50 (hardcover).

OBSTETRICS

Power and the Profession of Obstetrics. By William R. Arney. 230 pp., illustrated. Chicago, University of Chicago Press, 1982. $25.00 (hardcover).

PSYCHIATRY

Psychiatric Administration. A Comprehensive Text for the Clinician-Executive. Edited by John A. Talbott, MD and Seymour R. Kapson, MD. 410 pp., illustrated. New York, Grune & Stratton, 1983. $38.50 (hardcover).

PUBLIC HEALTH

International Perspectives on Neglected Sexually Transmitted Diseases. Edited by King K. Holmes, MD and Per-Anders Mårdh, MD. 336 pp., illustrated. New York, McGraw Hill, 1983. $45.00 (hardcover).

SURGERY

Color Atlas of Chest Trauma and Associated Injuries. Vol 1. Edited by Augustin Besson, MD and Frederic Saegesser, MD. 384 pps., illustrated. Oradell, NJ, Medical Economics Books, 1983. $87.50 (hardcover).

Cope's Early Diagnosis of the Acute Abdomen. Sixteenth edition. Revised by William Silen, MD. 284 pp., illustrated. New York, Oxford University Press, 1983. $12.95 (softcover).

Alfred Braun, MD, New York City. Died May 22, 1983; age 104. He graduated from Columbia University College of Physicians and Surgeons in 1902. He was a Fellow of the American College of Surgeons, a Diplomate of the American Board of Otolaryngology, and a member of the American Laryngological, Rhinological and Otological Society, the Academy of Medicine, the New York County Medical Society, and the Medical Society of the State of New York.

Richard Lee Burleson, MD, Syracuse. Died May 21, 1983; age 45. He was a 1964 graduate of Bowman Gray School of Medicine of Wake Forest College. He was a Fellow of the American College of Surgeons, a Diplomate of the American Board of Surgery, a member of the Onondaga County Medical Society, and the Medical Society of the State of New York.

Ignatius M. Byrner, MD, Rockaway Point. Died June 22, 1983; age 71. He graduated from Universita Degli Studi Di Medicina E. Chirurgia in 1936. His memberships included the American Academy of Family Practice, the Medical Society of the County of Queens, and the Medical Society of the State of New York.

Charles Henry Collins, MD, Rochester. Died June 6, 1983; age 51. He graduated from the University of Rochester School of Medicine and Dentistry in 1957. He was a member of the Medical Society of the County of Monroe and the Medical Society of the State of New York.

Arthur C. De Graff, MD, Newtown, CT. Died May 25, 1983; age 84. He graduated in 1921 from the New York University College of Medicine. Dr. De Graff was a Fellow of the American College of Cardiology, and the American College of Physicians. He was a Diplomate of the American Board of Internal Medicine. His memberships included the Academy of Medicine, the American Physiological Society, the American Society for Clinical Investigation, the Society for Experimental Biology and Medicine, the New York County Medical Society, and the Medical Society of the State of New York.

Dora Rosenberg Eliassow, MD, Locarno, Switzerland. Died December 22, 1982; age 83. Dr. Eliassow graduated from Albert-Ludwigs-University Mededizinische Fakultat, Freiburg, Baden in 1925. She was a member of Medical Society of the County of Queens and the Medical Society of the State of New York.

Morris Feller, MD, Brooklyn. Died December 2, 1982; age 72. He was a 1935 graduate of St. Louis University School of Medicine. He was a Diplomate of the American Board of Internal Medicine, a member of the Medical Society of the County of Kings, and the Medical Society of the State of New York.

Louis Richard Ferraro, MD, Richmond, VA. Died June 4, 1983; age 78. He graduated from New York University College of Medicine in 1929. He was a Fellow of the American College of Pathologists, a Diplomate of the American Board of Pathology, a member of the American Society of Clinical Pathologists, a member of the Nassau County Medical Society, and the Medical Society of the State of New York.

Henry Field, MD, Freehold, NJ. Died July 17, 1982; age 83. He graduated from Hamburgische Universitat Medizinische Fakultat, Hamburg in 1923. He was a member of the American Academy of Family Practice, the Medical Society of the County of Queens, and the Medical Society of the State of New York.

Henry H. Forsyth, MD, Fairport. Died March 23, 1983; age 69. He was a 1940 graduate of the University of Rochester School of Medicine and Dentistry. Dr. Forsyth was a Fellow of the American College of Radiology, and a Diplomate of the American Board of Radiology. His memberships included the Radiological Society of New York State, the Academy of Medicine, the Radiological Society of North America, Inc., the Medical Society of the County of Monroe, and the Medical Society of the State of New York.

James Joseph Foster, MD, Corning. Died May 30, 1983; age 65. He was a 1948 graduate of the University of Rochester School of Medicine and Dentistry. He was a Fellow of the American College of Surgeons, a Diplomate of the American Board of Surgery, and a member of the Stuben County Medical Society, and the Medical Society of the State of New York.

Hedwig Fischer, MD, Syracuse. Died April 6, 1983; age 95. He was a 1915 graduate of the Medizinische Fakultat Der Universitat, Wien and a member of the Onondaga County Medical Society and the Medical Society of the State of New York.

Robert E. Gioia, MD, Brooklyn. Died May 27, 1983; age 62. He graduated from the Universita Degli Studi Di Palermo, Facolta Di Medicine E Chirurgia in 1952. He was a Diplomate American Board of Pediatrics, a member of the American Academy of Pediatrics, the Pan American Medical Association, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

Benjamin Joseph Gordon, MD, Brooklyn. Died June 4, 1983; age 70. He was a 1956 graduate of the Meharry Medical College, a member of the Medical Society of the County of Kings, and the Medical Society of the State of New York.

David Granger, MD, New Haven, CT. Died June 27, 1983; age 86. He was a 1919 graduate of Columbia University College of Physicians and Surgeons and a member of the New York County Medical Society and the Medical Society of the State of New York.

Cecil Samuel Gross, MD, North Babylon. Died June 22, 1983; age 80. He graduated from University of London Faculty of Medicine in 1930 and was a member of the Suffolk County Medical Society and the Medical Society of the State of New York.

Nathan Harold Hass, MD, West Orange, NJ. Died June 11, 1982; age 71. He graduated from the Licentiate of the Royal College of Physicians of Edinburgh in 1936. He was a Fellow of American College of Angiology, a Diplomate American Board of Family Practice, a member of the American Academy of Family Practice, the American Geriatrics Society, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

Mary O'Neil Hawkins, MD, New York. Died May 31, 1983; age 86. She graduated from Columbia University College of Physicians and Surgeons in 1927. Dr. Hawkins was a member of the American Psychoanalytic Association, the New York County Medical Society, and the Medical Society of the State of New York.

Walter Kaufmann, MD, Flushing. Died

May 27, 1983; age 69. He graduated in 1940 from the Universitat Bern Medizinische Fakultat. Dr. Kaufmann was a member of the Queens County Medical Society and the Medical Society of the State of New York.

Raymond F. Kircher, MD, Albany. Died May 17, 1983; age 88. He graduated from Albany Medical College of Union University in 1917 and was a member of the Medical Society of the County of Albany and the Medical Society of the State of New York.

Sheldon Kotkin, MD, Valley Stream. Died June 7, 1983; age 62. He graduated from Middlesex University School of Medicine in 1945. He was a Fellow of the American College of Anesthesiologists, a Diplomate of the American Board of Anesthesiologists. His memberships included the American Society of Anesthesiologists, Inc., the New York State Society of Anesthesiologists, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

Abraham Klein, MD, Putnam Valley. Died April 22, 1983; age 74. He graduated from the Medizinische Fakultat Der Universitat, Wien in 1935. He was a member of the Medical Society of the County of Kings and the Medical Society of the State of New York.

Charles Jacob Lambert, MD, Plainview. Died June 27, 1983; age 68. He was a 1941 graduate of the Universite de Lausanne Faculte de Medecine and a member of the Nassau County Medical Society and the Medical Society of the State of New York.

Bernhard Lauber, MD, Jamaica. Died October 8, 1982; age 71. He graduated from Universita Degli Studi Di Bologna, Facolta Di Medicina E Chirugia in 1937 and a member of the Medical Society of the County of Queens and the Medical Society of the State of New York.

Jerome Lawrence, MD, East New Market. Died April 19, 1983; age 70. He graduated from Duke University School of Medicine in 1939 and was a Diplomate of the American Board of Orthopedic Surgery, and a member of the New York County Medical Society and the Medical Society of the State of New York.

Harvey Poliakoff, MD, Rockville Center. Died June 3, 1983; age 68. Dr. Poliakoff graduated from New York University College of Medicine in 1938. He was a Fellow of the American College of Cardiology, a Fellow of the American College of Physicians, and a Diplomate of the American Board of Internal Medicine. His memberships included the Clinical Society of the New York Diabetes Association, the Nassau County Medical Society, and the Medical Society of the State of New York.

Charles Leslie Pope, MD, Binghamton. Died April 17, 1983; age 83. He was a 1924 graduate of McGill University Faculty of Medicine and a Fellow of the American College of Surgeons. Dr. Pope was a member of the Broome County Medical Society and a member of the Medical Society of the State of New York.

John H. Rathbone, MD, Hamilton. Died June 5, 1983; age 80. He was a 1927 graduate of Columbia University College of Physicians and Surgeons and a Diplomate of the American Board of Urology. Dr. Rathbone was a member of the American Urological Association, the Medical Society of the County of Madison, and the Medical Society of the State of New York.

Gregory Sarr, MD, Clifton Springs. Died May 28, 1983; age 73. He was a 1934 graduate of the American University of Beirut School of Medicine. He was a Fellow of American College of Surgeons, a Diplomate American Board of Urology. His memberships included the Academy of Medicine, the American Urological Association, the Ontario County Medical Society, and the Medical Society of the State of New York.

Siegmund Scharge, MD, New York. Died December 2, 1982; age 78. He was a 1929 graduate of the Medizinische Fakultat Der Universitat, Wien and a member of the Medical Society of the County of Kings and the Medical Society of the State of New York.

Paul Stone, MD, Long Island City. Died November 26, 1982; age 87. He graduated from Hamburgische Universitat Medizinische Fakultat, Hamburg in 1920 and was a member of the Medical Society of the County of Queens and the Medical Society of the State of New York.

Martin Lewy, MD, Brooklyn. Died December 22, 1982; age 80. He was graduated from Friedrich-Wilhelms-Universitat Medical Fakultat, Berlin, Prussia in 1924. His memberships included the American Academy of Family Practice, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

Murray L. Meiselman, MD, Floral Park. Died December 23, 1982; age 73. He was a 1936 graduate of Licentiate of the Royal College of Physicians of Edinburgh. He was a Fellow of American College of Angiology, a member of the New York Cardiological Society, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

Meyer Morton Melicow, MD, New York. Died June 3, 1983; age 88. He was a 1920 graduate of Columbia University College of Physicians and Surgeons. His memberships included the New York Pathological Society, the Academy of Medicine, the American Urological Association, the International Academy of Pathology, the New York County Medical Society, and the Medical Society of the State of New York.

Israel Torres-Mendoza, MD, Mamaroneck. Died April 16, 1983; age 55. He was a 1955 graduate of the University of Puerto Rico School of Medicine and a member of the Bronx County Medical Society and the Medical Society of the State of New York.

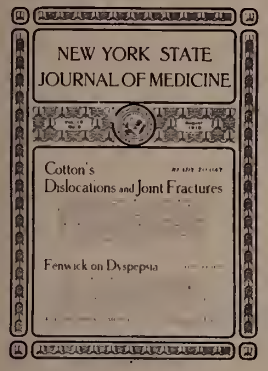
Ralph C. Parker, MD, Pittsford. Died May 31, 1983; age 73. He graduated from Harvard Medical School in 1937. He was a Fellow of American College of Cardiology, a Fellow of the American College of Physicians, a Diplomate of the American Board of Internal Medicine and his memberships included the Academy of Medicine, the Medical Society of the County of Monroe, and the Medical Society of the State of New York.

Joseph Phelps, MD, Oneonta. Died June 20, 1983; age 84. He was a 1923 graduate of Hahnemann Medical College and Hospital of Philadelphia. His memberships included the Otsego County Medical Society and the Medical Society of the State of New York.

Benno J. Troidle, MD, Cornwall. Died June 10, 1983; age 81. He was graduated from Albany Medical College of Union University in 1926. His memberships included the Medical Society of the County of Orange and the Medical Society of the State of New York.

Correction. In the Obituary Section of our June 1983 *Journal* Dr. Asta J. Wittner was erroneously referred to in the masculine gender. Dr. Wittner was a woman and we apologize for our oversight.

Cover to cover . . . . always good reading.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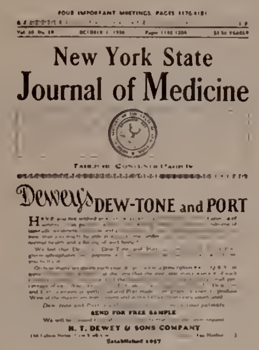
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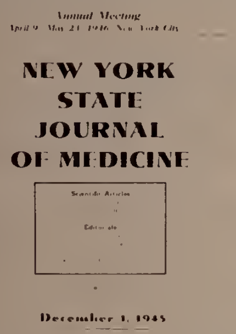
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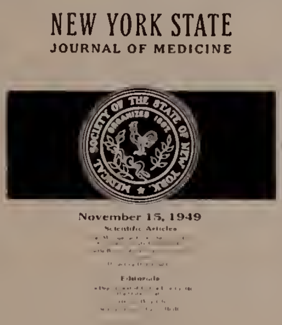
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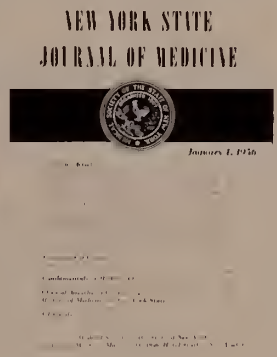
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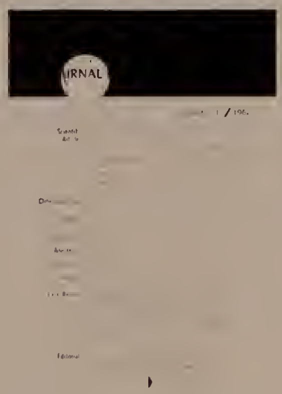

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Fundamental Personnel Management Techniques

October 18, 1983
1-4:30 pm
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November 15, 1983
1-4:30 pm
Purchase, NY

Better Collections, Billing and Insurance

October 19, 1983
8:30 am-noon
Albany, NY

November 16, 1983
8:30 am-noon
Purchase, NY

Reception and Patient Flow Techniques

October 19, 1983
1-4:30 pm
Albany, NY

November 16, 1983
1-4:30 pm
Purchase, NY

Use of Computers in Medical Practice

October 20, 1983
9 am-4:30 pm
Buffalo, NY

November 17, 1983
9 am-4:30 pm
Lake Success, NY

Practice Development Techniques

October 21, 1983
8:30 am-noon
Buffalo, NY

November 18, 1983
8:30 am-noon
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Both workshops are conducted by Conomikes Associates, Inc.—nationally known productivity consultants for the health professions. Conomikes workshops have been sponsored by 25 state medical societies and the American College of Obstetricians and Gynecologists; American Academy of Orthopaedic Surgeons; American Council of Otolaryngology; American Association of Ophthalmology; American Academy of Dermatology; American Society of Internal Medicine, and American Academy of Family Physicians.

Fundamental personnel management techniques

Recruiting and selection techniques
Getting the best possible employees

Training
Methods that work

Job evaluation
Performance review and how to do it
Terminating an employee—how to

Salary review
When and how should it be done

Developing job descriptions
To reduce confusion and job conflicts
To improve communications

Improving personnel utilization through task analysis
Making it possible to enlarge jobs and shift tasks among employees

Personnel problems question and answer session

Half-day workshop registration fees:
$65—members/staff
$75—nonmembers/staff

Better collections, billing and insurance methods

Collections
Cutting collection costs
Improving your collections percentages
Patient education
Collecting more effectively at the front desk
Establishing a definitive collection policy
Collection techniques that improve your cash flow
How to use the phone to collect
Aged trial balance and its use
Collection agencies and other ways to deal with delinquent accounts

Billing
Reducing the number of statements you send
Designing charge tickets that serve as take-home statements
Point-of-service collection beats billing
The Super Bill reduces paperwork
Micro-billing saves time and money
Accounts receivable system review and checklist

Billing
How to cut down on insurance processing costs
Physician education
Patient education
Use of standard insurance forms
The Super Bill: reduce insurance billing by 50%
Communicating with insurance companies
The Insurance claims log: makes follow-up easy

Accounts payable review
Check writing systems
Invoice handling
Petty cash
Refunds
Profitable use of your bank deposits

Half-day workshop registration fees:
$65—members/staff
$75—nonmembers/staff

Reception and patient flow techniques

Appointment scheduling control
Improving patient service
Dealing with key problems: work-ins, no-shows, cancels
Designing your own scheduling system
Modified wave techniques—they actually work!
Hourly control, daily control
Effective patient-recall systems

Improved telephone management
Telephone policies and how to develop them
Telephone procedures checklist—working tools for anyone answering the telephone
How to curb telephone interruptions of physicians and back office personnel
New equipment ideas
Telephone tips

Front office strategy
Cutting down on logjams at front desk

Medical records
Filing systems that work for you: alphabetical vs numerical
Cutting down on "lost" charts
Dictation and typing tips
Active-inactive-retired records and how to handle them

Half-day workshop registration fees:
$65—members/staff
$75—nonmembers/staff

Use of computers in medical practice (not a technical course in data processing)

Computer billing systems—Options
Service bureaus—batch billing
Service bureaus—on-line systems
Owning your own computer

Service bureaus—Batch billing
How it works for your office
Costs of these services
What sort of volume justifies using this service?
How to check out this service
Things to watch out for

Service bureaus—On-line systems
How they work in your office
Costs of these services
Advantages over batch billing systems
When should you consider this type of system?
What questions should you ask to check this out?
Traps to avoid

Owning your own computers
Comparing mini-computers and micro-computers
State of the art
Cost comparisons
Software—programming considerations
Pitfalls—learn from other physicians' mistakes

General considerations
Conversion problems: costs, personnel considerations; timetables
How will your patients accept something different?
What reports do you need? Do you need computerization to get these reports?

Full-day workshop registration fees:
$125—members/staff
$175—nonmembers/staff

Practice development techniques

Practice building with current patients
How to hold on to them
Scheduling considerations

Patient satisfaction surveys
How to design one
How to get best results
Other ways to monitor your patients' attitudes towards your practice

Should you use a newsletter?
What should it contain?
Circulation
Other ways of communicating

Attracting new patients
How to analyze and develop your best referral sources
Innovative office hour considerations
Facilities/location considerations

Developing a logbook
How to manage it and what to do with it

Patient information brochures
How to develop one for your practice
Distribution for maximum effectiveness

Community exposure
Marketing ideas that have worked for other practices

Involving your office staff
What can they do?

Improved physician/patient communications
Tips on patient pleasers

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$65—members/staff
$75—nonmembers/staff

Workshop materials

Each workshop features a workbook packed with practical information usable at the workshops and for your medical office reference shelf.

CEU's (continuing education units)

The American Association of Medical Assistants will award .3 CEU's for attendance at each ½ day workshop and .6 CEU's for each full day workshop.

Tax deduction for education expenses

Treasury Department regulation 1.162-5 permits an income tax deduction for educational expenses (registration fees and cost of travel, meals and lodging) undertaken to maintain or improve skills required in one's employment or other trade or business.

Registration Information

- A complete schedule, with workshop locations, is on the following page
- Registration is open to physicians and their staffs
- Registration is limited and available on a first-come, first-serve basis
- Registration is not completed until both the registration form and fee are submitted
- Reduced registration fees apply to member physicians and their staffs
- Physicians can qualify for the reduced fees for themselves and their staffs by submitting a completed application and dues no later than one week before the workshop
- Refunds will be given only if requested at least one week prior to the workshop
- Registration fees (per participant):

Half-day workshops:	$65 for members & their staffs $75 for nonmembers and their staffs
Use of computers in medical practice	$125 for members & their staffs $150 for nonmembers & their staffs

- For additional information, call MSSNY's Division of Membership, (516) 488-6100, extension 252

Registration form

Please make your check payable to MSSNY and mail with registration form to:
MSSNY Workshops, 420 Lakeville Rd., Lake Success, NY 11042.

Please register me to attend:

☐ Personnel management techniques:	☐ Albany (October 18)	☐ Purchase (November 15)
☐ Better collections, billing & insurance:	☐ Albany (October 19)	☐ Purchase (November 16)
☐ Reception & patient flow techniques:	☐ Albany (October 19)	☐ Purchase (November 16)
☐ Use of computers in medical practice:	☐ Buffalo (October 20)	☐ Lake Success (November 17)
☐ Practice development techniques:	☐ Buffalo (October 21)	☐ Lake Success (November 18)

Enclosed is my ☐ member ☐ nonmember registration fee of $ ________ each for myself, and/or my staff

Registrant's name ____

Physician employer's name (if applicable) ____

Office address ____

____ Telephone ______________

☐ Please send me membership information so I, too, can qualify for the reduced registration fee.

☐ I can't attend now. Please advise me of future workshops.

To register more than one person, please copy this form or type complete information on separate sheet.

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Hilleboe Auditorium Roswell Park Memorial Institute 666 Elm Street Buffalo, New York				8:30–4:30 pm Thursday October 20	8:30–noon Friday October 21
Westchester County Medical Society Purchase, New York	1–4:30 pm Tuesday November 15	8:30–noon Wednesday November 16	1–4:30 pm Wednesday November 16		
Medical Society of the State of New York 420 Lakeville Rd. Lake Success, New York				8:30–4:30 pm Thursday November 17	8:30–noon Friday November 18

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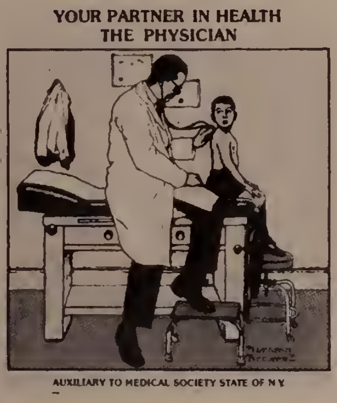
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Announce a Postgraduate Course

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Gerald Gibbs, MB, Ch.B. (New Zealand)
Peter Hand, DVM (USA)
Etsutaro Ikezono, MD (Japan)
Felix Mann, MD (England)
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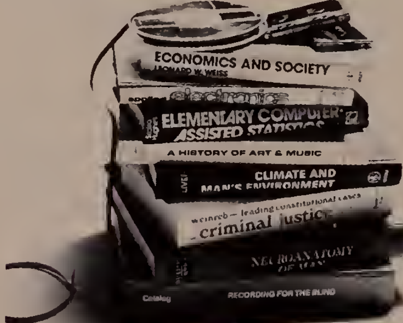

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536 pp., illustrated. New York,
Appleton-Century-Crofts, 1981.
Reviewed by Donald L. Morton, M.D., UCLA
School of Medicine in the New England Journal
of Medicine, Vol. 305, No. 20, p.1223.

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Please send information to the Editor, MEETINGS AND LECTURES, 420 Lakeville Rd, PO Box 5404, Lake Success, NY 11042.

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Emergency Procedure Workshop. October 12, and 26. For information contact: Walter Le Strange, RN, Bellevue Hospital Center, New York City. Telephone: (212) 561-6561.

Clinical Pharmacology of Cardiac Antiarrhythmic Agents: Classical and current concepts reevaluated. October 12–14. **Macromolecular Structure and Specificity Computer Assisted Modeling and Applications.** For information contact: The New York Academy of Sciences, 2 E 63 St, New York 10021.

Current Concepts in Medical Oncology. October 24–28. For information contact: Ms. Charlene Landis, Memorial Sloan-Kettering Cancer Center, New York 10021. Telephone: (212) 794-6754.

Postgraduate Reproductive Endocrinology Symposium. October 28-29. For information contact: Anne R. Warner, Lenox Hill Hospital, New York 10021. Telephone: (212) 794-4500.

Renal Biopsy in Medical Diseases of the Kidneys. October 17–21. For information contact: Dr. Elizabeth C. Gerst, College of Physicians & Surgeons of Columbia University, 630 W 168 St, New York. Telephone: (212) 694-3682.

Learning Clinical Dermatology Through Dermatopathology. October 6–8. **The New Cardiology.** October 14–16. **Tardive Dyskinesia and Other Movement Disorders: Recognition and management for clinicians.** October 29. For information contact: Lydia Lawrence, NYU Postgraduate Medical School, 550 First Ave, New York 10016. Telephone: (212) 340-5295.

Update Your Medicine. October 19. For information contact: Ms. Dena Toussaint (212) 472-6119 or Dr. Lila Wallis (212) 737-4444 of the Association of Practicing Physicians of the New York Hospital.

Ventricular Arrhythmias: New concepts in diagnosis and management. October 17. For information contact: Ann J. Boehme, Long Island Jewish-Hillside Medical Center, New Hyde Park, NY. Telephone: (212) 470-2114.

Division of Ophthalmology Conference Schedule of the North Shore University Hospital. Topic to be announced October 6. **Clinical Conference** October 13. **Potential Acuity Measurement** October 20. **Intraocular Long-Standing Gases in Retina and Vitreous Surgery.** October 27. For information contact: North Shore University Hospital, 300 Community Dr, Manhasset, NY 11030.

Seventh Annual Day in Cardiology. October 26. For information contact: Toni Calabrese Boelsen, White Plains Hospital Medical Center, White Plains, NY 10601. Telephone: (914) 681-1118.

Hypertension Symposium. October 19. For information contact: Dr. Guy C. McCoy, Division of Nephrology, Albany Medical College, Albany, NY 12208. Telephone: (518) 445-5178.

Advanced Trauma Life Support Course. October 28–29. For information contact: Wm. M. Stahl, MD. Telephone: (212) 579-5000.

National Symposium on Proteinuria. October 18. For information contact: Mrs. Phyllis LeBeau. Telephone: (212) 587-3891.

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Infections of the Central Nervous System. October 18. For information contact: Walter R. Slade, Jr, MD, Neurology Service, VA Medical Center, 800 Poly Pl, Brooklyn, NY 11209.

Lectures in Continuing Pediatric Education. October 6, 1983 through May 24, 1984. For information contact: Jack Sherman, MD. Telephone: (516) 542-3391. **Seminars in Psychiatry and Psychology.** October 7, 1983 through April 27, 1984. For information contact: Yogendra Upadhyay, MD. Telephone: (516) 542-3055. **New Concepts in Etiology and Treatment of Leukemia.** October 20. For information contact: Carl Pochedly, MD. Telephone: (516) 542-3336.

First Annual Symposium in Physical Medicine: Update electrical modalities. October 21, 1983. For information contact: Ernesto S. Capulong, MD, Nassau County Medical Center, 2201 Hempstead Turnpike, East Meadow, NY 11554. Telephone: (516) 542-2521.

Annual Postgraduate course in Clinical Pharmacology, **Drug Development and Regulation: 1983.** October 24–28. For information contact: William M. Wardell, MD, PhD, University of Rochester School of Medicine and Dentistry, Rochester, NY 14642. Telephone: (716) 275-4003.

Effects of Chemotherapy on Solid Tumors: Ability to function during therapy. November 21. **Determination of Disability in Cerebral Palsy and Spina Bifida.** December 5. **Hypertension: Present concepts and functional limitations.** December 19. For information contact: Bettye Soffer, The Office of Disability Determinations, New York State Department of Social Services, 110 Williams St, New York City. Telephone: (212) 587-3891.

VI Annual Symposium **Practical Topics in Skeletal Radiology, including CT of the Spine.** October 21–22. For information contact: SUNY Upstate Medical Center, Office of Continuing Education. Telephone: (315) 473-4304.

"I Can Cope". October/November. For information contact: Cindy Mugharbil, Westchester County Medical Society. Telephone: (914) 347-3260.

AROUND THE NATION
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Arizona

Geriatric Medicine Today and Tomorrow. October 28, and 29. The Western Division of the American Geriatrics Society. Sun City. For information contact: Marian Richardson. Telephone: (602) 977-1877.

California

Update on Clinical Medicine. October 28. For information contact: Continuing Education, Pacific Medical Center, P.O. Box 7999, San Francisco, CA 94120.

Florida

35th Annual Convention and Scientific Assembly, American Academy of Family Physicians. October 10–13. Miami. For information contact: Orris O. Rollie, M.D., Chairman, Committee on Scientific Program. Telephone: (816) 333-9700.

Massachusetts

Annual Course in Pediatric Radiology. October 31–November 2. Boston. For information contact: Educational Resources Associates. Telephone: (617) 738-8859 or 8861.

Annual Workshops & Scientific Program of the Society for Clinical and Experimental Hypnosis, Inc. October 11–16. Cambridge. For information contact: Marion Kenn, Administration Director, The Society for Clinical & Experimental Hypnosis, Inc., 129A Kings Park Dr., Liverpool, NY 13088.

Ohio

Laser Photoradiation: Bioeffects and Applications. October 28–30. For information contact: Mary Ann McHenry, Ed Dir, Institute of America, 5151 Monroe Street, Toledo, OH 43623. Telephone: (419) 882-8706.

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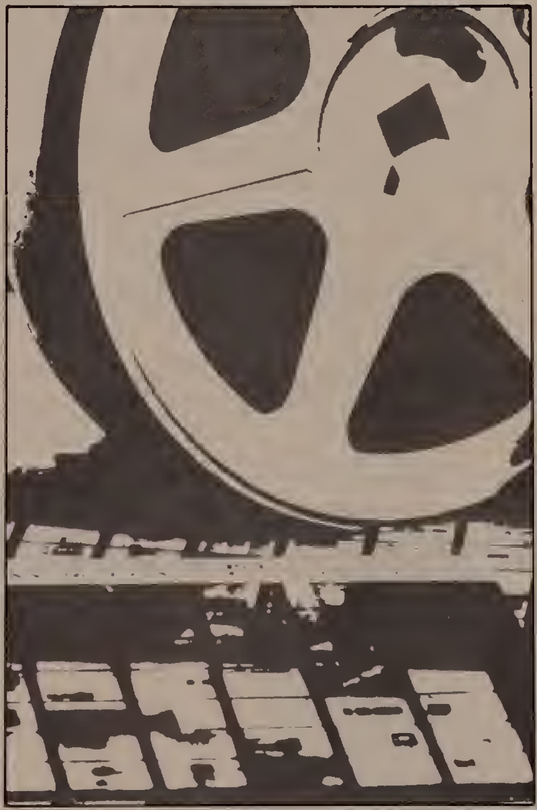

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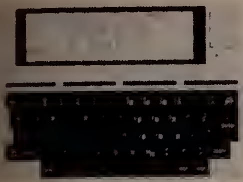

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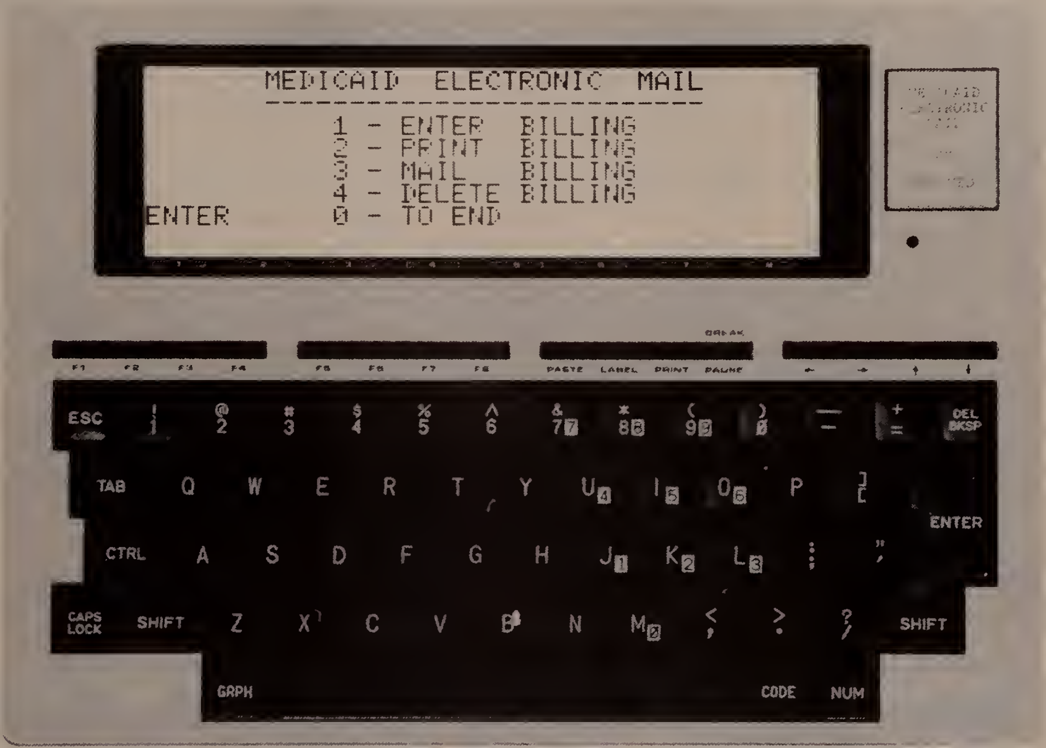

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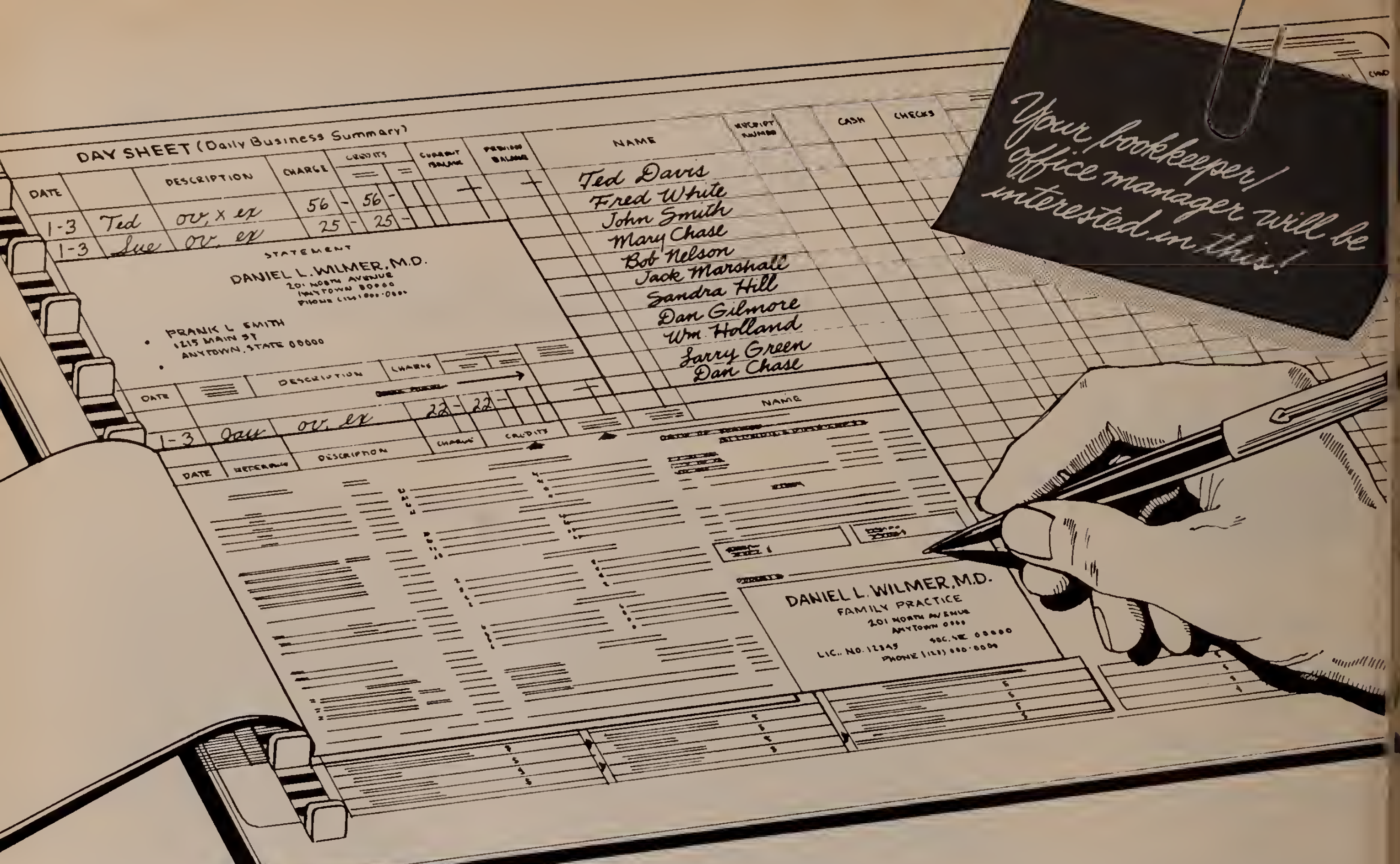
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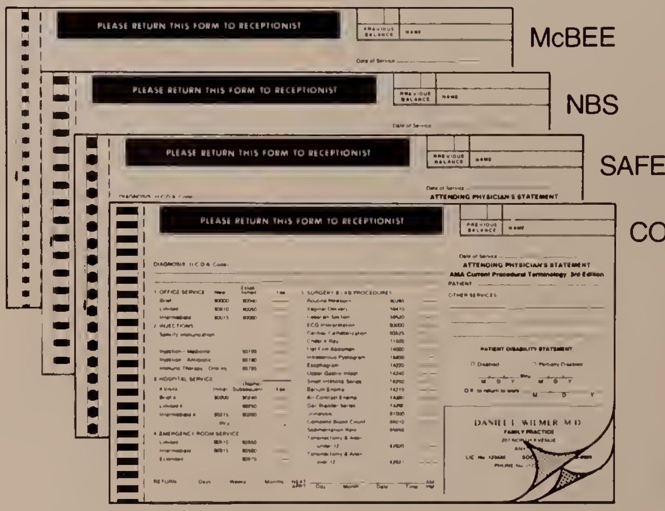
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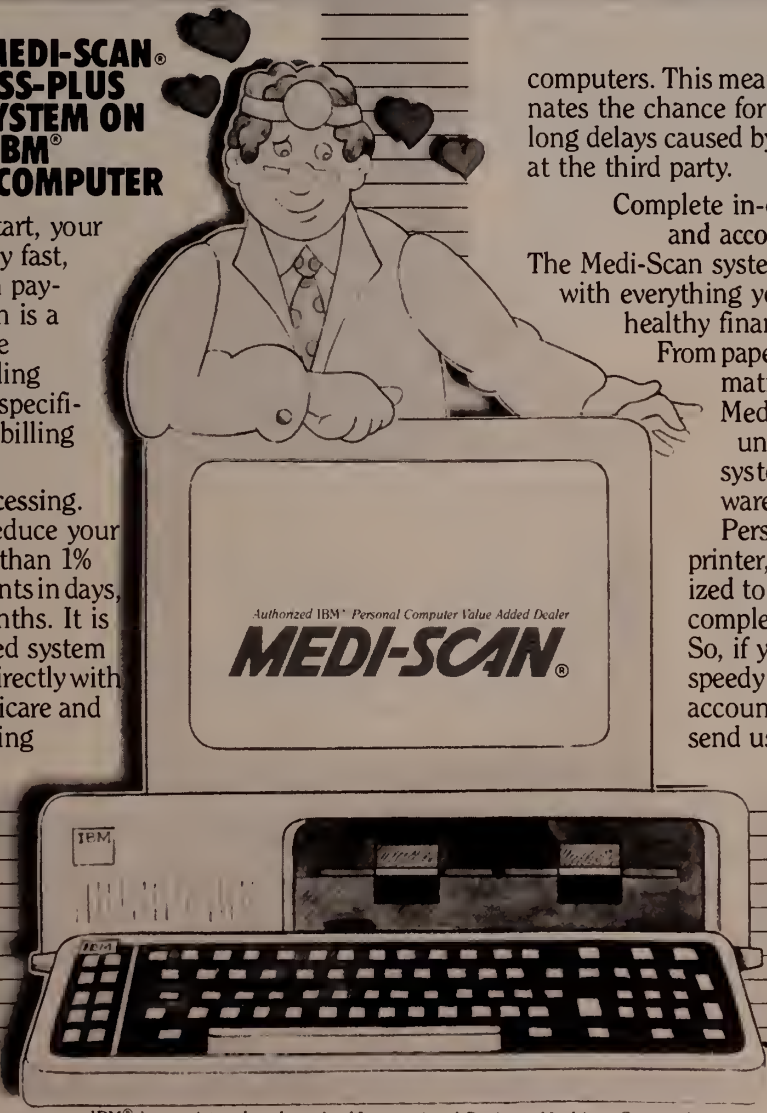
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INDERAL LA controls blood pressure without the problem of hypokalemia often associated with long-term diuretic therapy. Like conventional INDERAL, INDERAL LA should not be used in the presence of congestive heart failure, sinus bradycardia, heart block greater than first degree, or bronchial asthma.

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ONE™
TO COUNT ON

Start with 80 mg once daily...

Dosage may be increased to 120 mg or 160 mg once daily as needed to achieve additional control. When converting patients from other beta blockers, including INDERAL tablets, start with the nearest milligram equivalent of INDERAL LA once daily and evaluate clinical results to determine if dosage adjustment is necessary. For arrhythmias, use conventional INDERAL (propranolol HCl) tablets.

80 mg 120 mg 160 mg

The appearance of INDERAL LA capsules is a registered trademark of Ayerst Laboratories.

Please see next page for brief summary of prescribing information.

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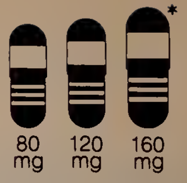

BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION SEE PACKAGE CIRCULAR.)*
INDERAL® LA BRAND OF propranolol hydrochloride
(Long Acting Capsules)

DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules.

CLINICAL PHARMACOLOGY. INDERAL is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.

The mechanism of the antihypertensive effect of INDERAL has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta-blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.

INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.

WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA. Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS. General: Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: bradycardia, congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

Central Nervous System: lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia, visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION—*Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—*Dosage must be individualized.* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—*Dosage must be individualized.* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily.

PEDIATRIC DOSAGE — At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

*The appearance of INDERAL LA capsules is a registered trademark of Ayerst Laboratories.

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Contemporary Hypnotic Therapy '83

Dalmane® [flurazepam HCl/Roche] Stands Apart

The Physician's Sleep Glossary

Some common sleep laboratory terms

poly•som•no•graph. An instrument which simultaneously records by electrodes physiological variables during sleep—for example, brain activity (EEG), eye movements (EOG), muscle tonus (EMG) and other electrophysiological variables. These readings indicate precisely when patients fall asleep, how many wake periods they experience, the quality of sleep and the duration of sleep.

sleep la•ten•cy. The period of time measured from "lights out," or bedtime, to the commencement or onset of sleep.

wake time af•ter sleep on•set. Intervals of time spent awake between onset of sleep and the end of the sleep period. The polysomnograph registers the length and frequency of the intervals.

to•tal sleep time. The amount of time actually spent in sleeping. This is estimated by subtracting wake times from the period encompassed by the onset and the termination of sleep.[1]

REM/NREM. 1. REM, or rapid eye movement, sleep is "active"—characterized by increased metabolic rates, elevated temperature and arousal-type EEG patterns. 2. NREM, or non-rapid eye movement, sleep represents "quiet" sleep stages. There are four distinct stages of NREM sleep.[2]

re•bound in•som•nia. A statistically significant worsening of sleep compared to baseline on the nights immediately following discontinuation of sleep medication.[3]

Dalmane® Ⓘⓥ
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15-mg/30-mg capsules

Efficacy objectively demonstrated in the sleep laboratory—the most valid environment for measuring hypnotic efficacy.

In numerous sleep laboratory investigations patients fell asleep sooner, slept longer and woke up less during the night[3-12] with

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Compared with temazepam and other hypnotics, onset of sleep is more rapid[4] with

Dalmane®

Fewer middle-of-the-night awakenings[4] with

Dalmane®

More total sleep time on nights 12 to 14 of therapy[4] and continued efficacy for up to 28 nights[5] with

Dalmane®

Rebound insomnia is avoided upon discontinuation [3,4,7] of

Dalmane®

Low incidence of morning "hangover"[14] with

Dalmane®

The efficacy of Dalmane has been studied in over 200 clinical trials with more than 10,000 patients.[3-15] During long-term therapy, which is rarely required, periodic blood, kidney and liver function tests should be performed. Contraindicated in patients who are pregnant or hypersensitive to flurazepam.

Please see summary of product information on following page.

References: 1. Williams RL, Karacan I: Introduction, chap. 1, in *Sleep Disorders: Diagnosis and Treatment*, edited by Williams RL, Karacan I, Frazier SH New York, John Wiley & Sons, 1978, p. 2. **2.** Data on file Hoffmann-La Roche Inc., Nutley, NJ. **3.** Kales A *et al: JAMA 241*:1692 1695, Apr 20, 1979. **4.** Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **5.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*(10):25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975 **13.** Zimmerman AM *Curr Ther Res 13*:18-22, Jan 1971. **14.** Kales A, Kales JD: *Pharmacol Physicians 4*(9) 1-6, Sep 1970. **15.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ

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Dalmane® ⓒⅣ
(flurazepam HCl/Roche)

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

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THE SPASM/PAIN/SPASM CYCLE

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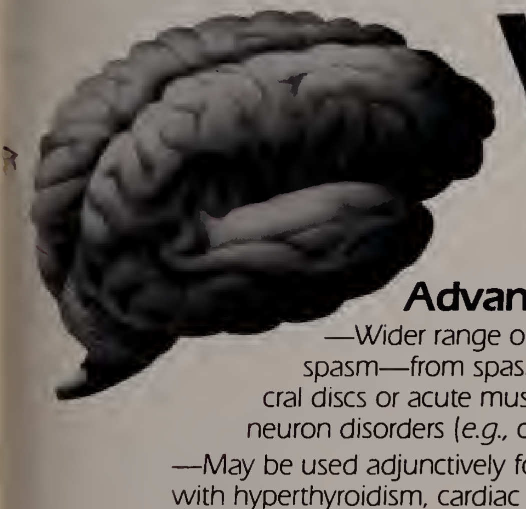

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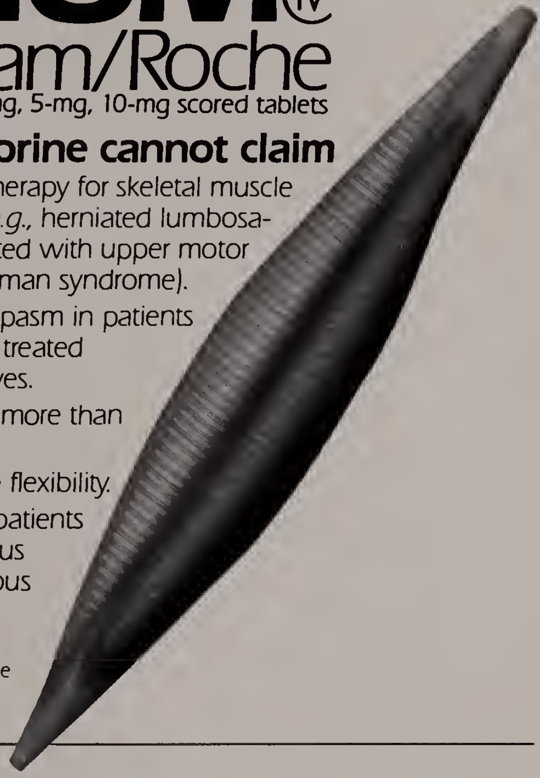

Advantages cyclobenzaprine cannot claim

—Wider range of indications as adjunctive therapy for skeletal muscle spasm—from spasm due to local pathology (*e.g.,* herniated lumbosacral discs or acute muscle strain) to spasm associated with upper motor neuron disorders (*e.g.,* cerebral palsy, athetosis, stiff-man syndrome).

—May be used adjunctively for relieving skeletal muscle spasm in patients with hyperthyroidism, cardiac patients and patients being treated with anticholinergics or guanethidine-type antihypertensives.

—Can be administered to patients less than 15 years and more than 6 months of age.

—Scored tablets in three strengths provide greater dosage flexibility.

Since drowsiness, fatigue and ataxia sometimes occur, patients should be cautioned against driving or operating hazardous machinery and should also be advised against simultaneous ingestion of alcohol.

References: 1. Rankin EA: *Contin Educ 3*(1):46-50, Jan 1975. **2.** When muscle spasm hobbles your patient. *Patient Care 8*(11):20-37, Jun 1, 1974.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

The clearance of Valium (diazepam/Roche) and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults.* Anxiety disorders, symptoms of anxiety, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed, adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

How Supplied: For oral administration, Valium (diazepam/Roche) scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100* and 500;* Prescription Paks of 50, available in trays of 10.* Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25,† and in boxes containing 10 strips of 10.†

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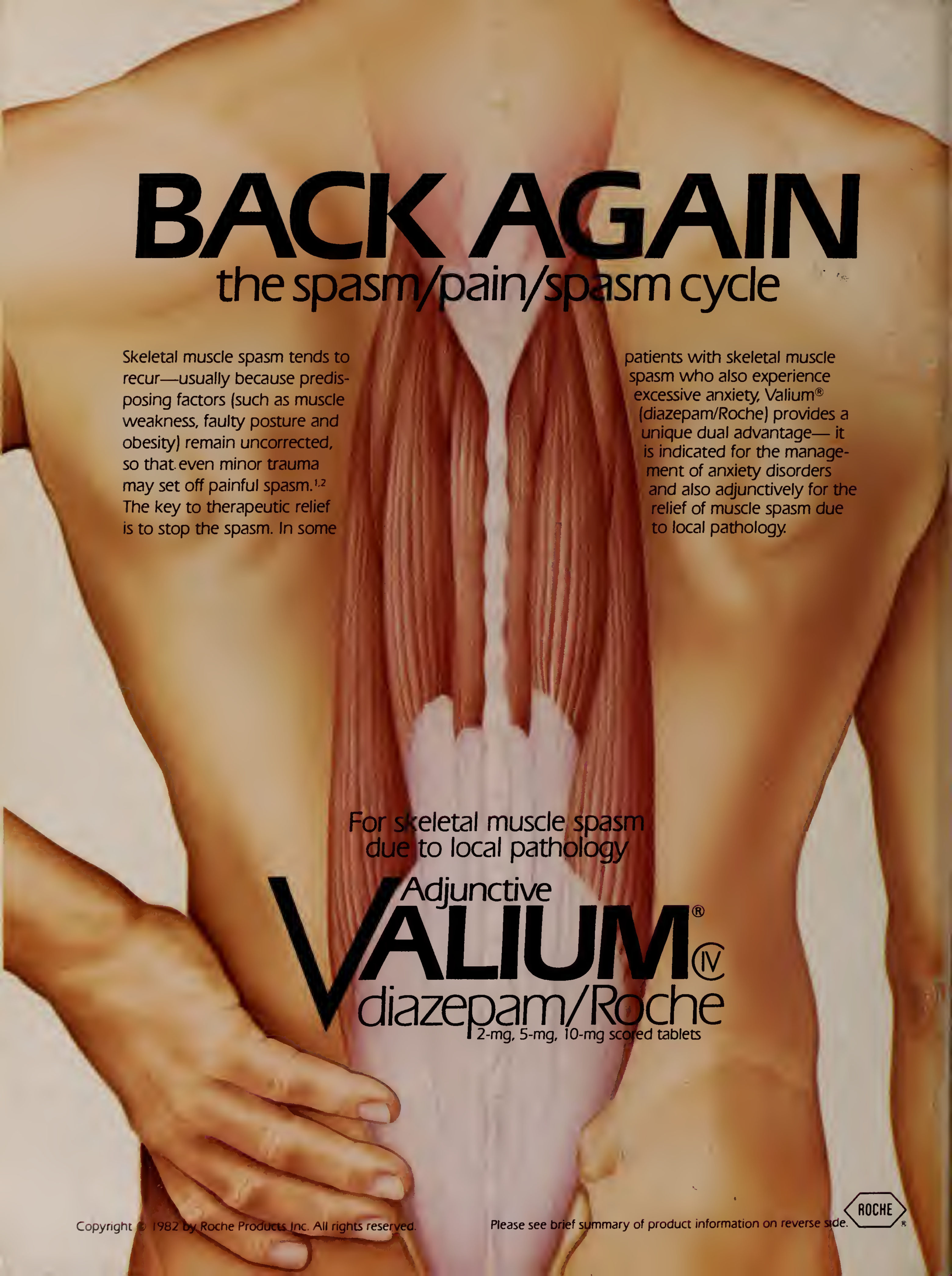

BACK AGAIN

the spasm/pain/spasm cycle

Skeletal muscle spasm tends to recur—usually because predisposing factors (such as muscle weakness, faulty posture and obesity) remain uncorrected, so that even minor trauma may set off painful spasm.[1,2] The key to therapeutic relief is to stop the spasm. In some patients with skeletal muscle spasm who also experience excessive anxiety, Valium® (diazepam/Roche) provides a unique dual advantage— it is indicated for the management of anxiety disorders and also adjunctively for the relief of muscle spasm due to local pathology.

For skeletal muscle spasm due to local pathology

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NEW YORK STATE JOURNAL OF MEDICINE

October, NOVEMBER 1983 • Volume 83, Numbers 11, 12

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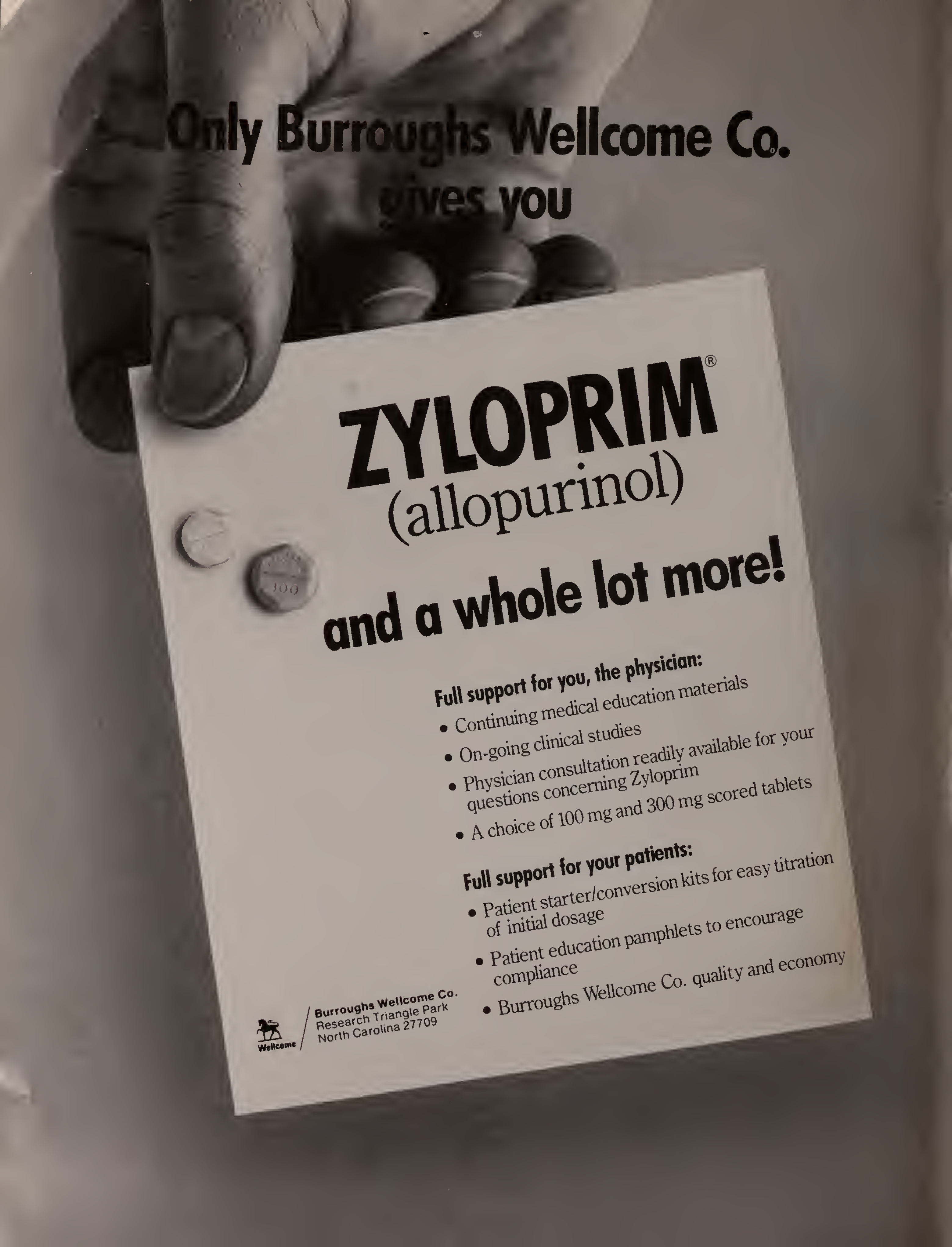

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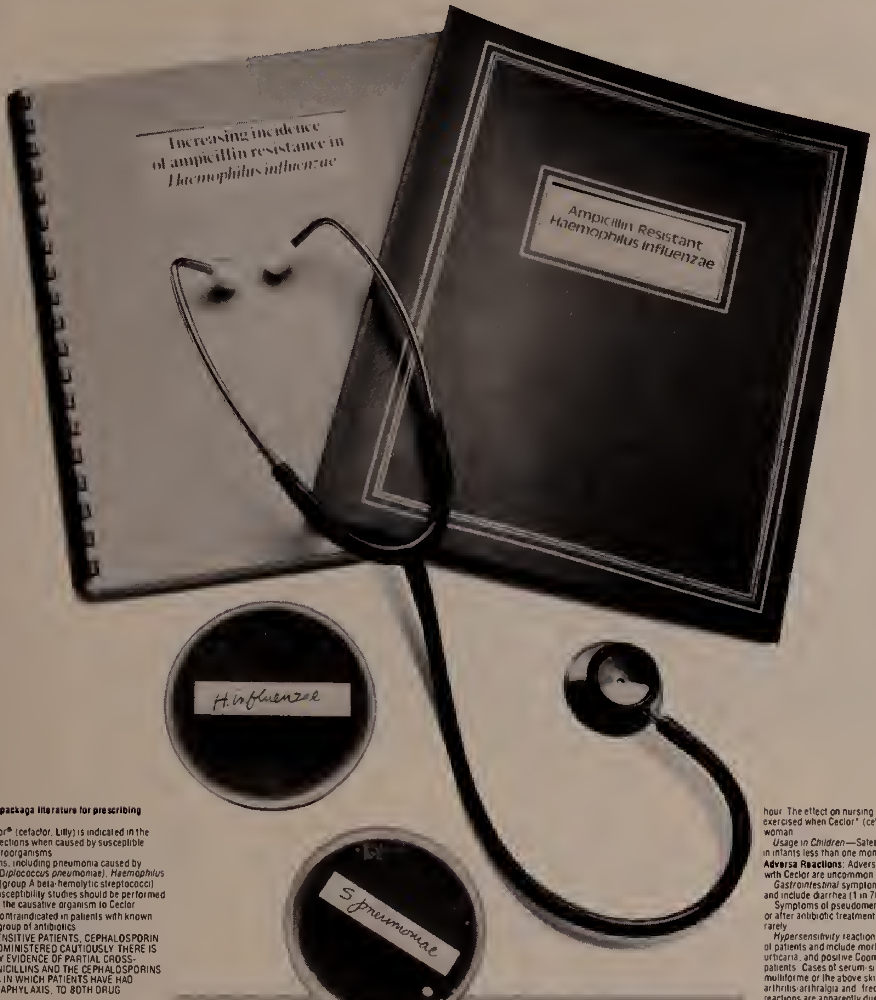
An added complication... in the treatment of bacterial bronchitis*



Brief Summary. Consult the package literature for prescribing information.

Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms.

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae)*, *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions*—If an allergic reaction to Ceclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy—Pregnancy Category B—Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers—Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor® (cefaclor, Lilly) is administered to a nursing woman.

Usage in Children—Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations of SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

[061782R]

Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

Ceclor®
cefaclor

Pulvules®, 250 and 500 mg

---

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.[8]

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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BRIEF SUMMARY
PROCARDIA® (nifedipine) **CAPSULES** For Oral Use

INDICATIONS AND USAGE: I. Vasospastic Angina: PROCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria: 1) classical pattern of angina at rest accompanied by ST segment elevation, 2) angina or coronary artery spasm provoked by ergonovine, or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography, the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PROCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm, or when angina is refractory to nitrates and/or adequate doses of beta blockers.

II. Chronic Stable Angina (Classical Effort-Associated Angina): PROCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or organic nitrates or who cannot tolerate those agents.

In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in those patients are incomplete

Controlled studies in small numbers of patients suggest concomitant use of PROCARDIA and beta blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs. (See Warnings.)

CONTRAINDICATIONS: Known hypersensitivity reaction to PROCARDIA.

WARNINGS: Excessive Hypotension: Although in most patients, the hypotensive effect of PROCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension. These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers.

Severe hypotension and/or increased fluid volume requirements have been reported in patients receiving PROCARDIA together with a beta blocking agent who underwent coronary artery bypass surgery using high dose fentanyl anesthesia. The interaction with high dose fentanyl appears to be due to the combination of PROCARDIA and a beta blocker, but the possibility that it may occur with PROCARDIA alone, with low doses of fentanyl, in other surgical procedures, or with other narcotic analgesics cannot be ruled out. In PROCARDIA treated patients where surgery using high dose fentanyl anesthesia is contemplated, the physician should be aware of these potential problems and, if the patient's condition permits, sufficient time (at least 36 hours) should be allowed for PROCARDIA to be washed out of the body prior to surgery.

Increased Angina: Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PROCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Beta Blocker Withdrawal: Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines. Initiation of PROCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PROCARDIA initiation. It is important to taper beta blockers if possible, rather than stopping them abruptly before beginning PROCARDIA

Congestive Heart Failure: Rarely, patients, usually receiving a beta blocker, have developed heart failure after beginning PROCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event

PRECAUTIONS: General: Hypotension: Because PROCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PROCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. (See Warnings.)

Peripheral edema: Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PROCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy. With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction

Drug interactions: Beta-adrenergic blocking agents: (See Indications and Warnings.) Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PROCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina.

Long-acting nitrates: PROCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Digitalis: Administration of PROCARDIA with digoxin increased digoxin levels in nine of twelve normal volunteers The average increase was 45%. Another investigator found no increase in digoxin levels in thirteen patients with coronary artery disease In an uncontrolled study of over two hundred patients with congestive heart failure during which digoxin blood levels were not measured, digitalis toxicity was not observed Since there have been isolated reports of patients with elevated digoxin levels, it is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing PROCARDIA to avoid possible over- or under-digitalization

Carcinogenesis, mutagenesis, impairment of fertility: When given to rats prior to mating, nifedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose.

Pregnancy: Category C. Please see full prescribing information with reference to teratogenicity in rats, embryotoxicity in rats, mice and rabbits, and abnormalities in monkeys.

ADVERSE REACTIONS: The most common adverse events include dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0 5% Syncopal episodes did not recur with reduction in the dose of PROCARDIA or concomitant antianginal medication Additionally, the following have been reported: muscle cramps, nervousness, dyspnea, nasal and chest congestion, diarrhea, constipation, inflammation, joint stiffness, shakiness, sleep disturbances, blurred vision, difficulties in balance, dermatitis, pruritus, urticaria, fever, sweating, chills, and sexual difficulties. Very rarely, introduction of PROCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related. Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

Laboratory Tests: Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CPK, LDH, SGOT, and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nifedipine therapy. The relationship to PROCARDIA therapy is uncertain. These laboratory abnormalities have rarely been associated with clinical symptoms Cholestasis, possibly due to PROCARDIA therapy, has been reported twice in the extensive world literature

HOW SUPPLIED: Each orange, soft gelatin PROCARDIA CAPSULE contains 10 mg of nifedipine PROCARDIA CAPSULES are supplied in bottles of 100 (NDC 0069-2600-66), 300 (NDC 0069-2600-72), and unit dose (10x10) (NDC 0069-2600-41). The capsules should be protected from light and moisture and stored at controlled room temperature 59° to 77°F (15° to 25°C) in the manufacturer's original container.

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Side effects are usually mild (most frequently reported are dizziness or lightheadedness, peripheral edema, nausea, weakness, headache and flushing, each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%).

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Please see PROCARDIA *brief summary on adjoining page.*

[*] Procardia is indicated for the management of:
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2) Angina where the clinical presentation suggests a possible vasospastic component.
3) Chronic stable angina without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or nitrates or who cannot tolerate these agents. In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks' duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in these patients are incomplete.

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The Physician's Sleep Glossary

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poly•som•no•graph. An instrument which simultaneously records by electrodes physiological variables during sleep—for example, brain activity (EEG), eye movements (EOG), muscle tonus (EMG) and other electrophysiological variables. These readings indicate precisely when patients fall asleep, how many wake periods they experience, the quality of sleep and the duration of sleep.

sleep la•ten•cy. The period of time measured from "lights out," or bedtime, to the commencement or onset of sleep.

wake time af•ter sleep on•set. Intervals of time spent awake between onset of sleep and the end of the sleep period. The polysomnograph registers the length and frequency of the intervals.

to•tal sleep time. The amount of time actually spent in sleeping. This is estimated by subtracting wake times from the period encompassed by the onset and the termination of sleep.[1]

REM/NREM. 1. REM, or rapid eye movement, sleep is "active"—characterized by increased metabolic rates, elevated temperature and arousal-type EEG patterns. 2. NREM, or non-rapid eye movement, sleep represents "quiet" sleep stages. There are four distinct stages of NREM sleep.[2]

re•bound in•som•nia. A statistically significant worsening of sleep compared to baseline on the nights immediately following discontinuation of sleep medication.[3]

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

ROCHE
Roche Products Inc.
Manati, Puerto Rico 00701

MEETINGS AND LECTURES

NEW YORK STATE 1983

MANHATTAN

Harpuder Lecture. The New York Society of Physical Medicine & Rehabilitation. Columbia University—Harlem Hospital Center. November 2, 1983. For information contact: Wanda Brodzka, MD. Telephone: (212) 491-8357.

Current Problems in DES Exposed Women. November 5, 1983. For information contact: Ann J. Boehme, Long Island Jewish-Hillside Medical Center. Telephone: (212) 470-2114.

Treadmill Stress Testing. November 7, 1983. For information contact: Bettye Soffer, Office of Disability Determinations, New York State Department of Social Services. Telephone: (212) 587-3891.

Nongynecological Cytology. November 9, 1983. For information contact: Victor Tchertkoff, MD, Metropolitan Hospital. Telephone: (212) 360-6253.

Emergency Procedures Workshop. November 9, 1983. For information contact: Walter LeStrange, RN, Bellvue Hospital Center. Telephone: (212) 561-6561.

Cell Mediated Immunity and the Allergist. November 9–11, 1983. For information contact: Dr. Elizabeth Gerst, CME Education Center, Columbia University. Telephone: (212) 694-3682.

Temporomandibular Joint—Pain and Dysfunction. November 10–12, 1983. For information contact: Educational Resources Associates, Inc., P.O. Box 369, Brookline, MA 02146. Telephone: (617) 738-8859/8861.

Surgical Courses in Lens Implanation. November 15–17. For information contact: Ruth Green, Opthalmological Foundation of America, Inc. Telephone: (212) 986-4848.

Update Your Medicine: November 16, 1983. For information contact: Ms. Dena Toussaint (212) 472-6119 or Dr. Lila Wallis (212) 737-4444.

Event-Related Brain Potentials in Psychopathology: P-300 Localization in Schizophrenia, its Morphology in Alcoholism, Related Findings in Dementia. November 16, 1983. For information contact: F. Frank LeFever, PhD, Helen Hayes Hospital, West Haverstraw, NY. 10993. Telephone: (914) 947-3000. Evenings and weekends, (212) 666-1717.

Acquired Immune Deficiency. November 17–19. For information contact The New York Academy of Sciences, 2 East 63rd St., New York, NY 10021. Telephone: (212) 838-0230.

Management of Cerebral Palsy: Update 1983. November 18, 1983. For information contact: Ms. Linda Steinhart, New York City Department of Health. Telephone (212) 566-8294.

International Symposium on High Frequency Ventilation. November 18–20, 1983. Charlene Landis, Memorial Sloan-Kettering Cancer Center. Telephone: (212) 794-6754.

The Fetal Patient: Assuring a Healthy Newborn. November 21 and 22, 1983. For information contact: Leona J. Shumer, New York University Medical Center. Telephone: (212) 922-1460.

Morris B. Bender Commemorative Symposium. November 30, 1983. For information contact: Melvin D. Yahr, MD, Mount Sinai Medical Center, 100th St. and Fifth Avenue, New York, NY 10029.

BRONX

Asthma. November 3, 1983. AIDS. November 10, 1983. **Screening for Disease–Routine vs Specific.** November 17, 1983. For information contact: Westchester Square Hospital, 2475 St. Raymond Avenue, Bronx, NY 10461. Telephone: (212) 430-9400.

BROOKLYN

(*continued on page 1212*)

INTRODUCING
THE
ONE
TO COUNT ON

NEW
ONCE-DAILY
INDERAL® LA
(PROPRANOLOL HCI) LONG ACTING CAPSULES

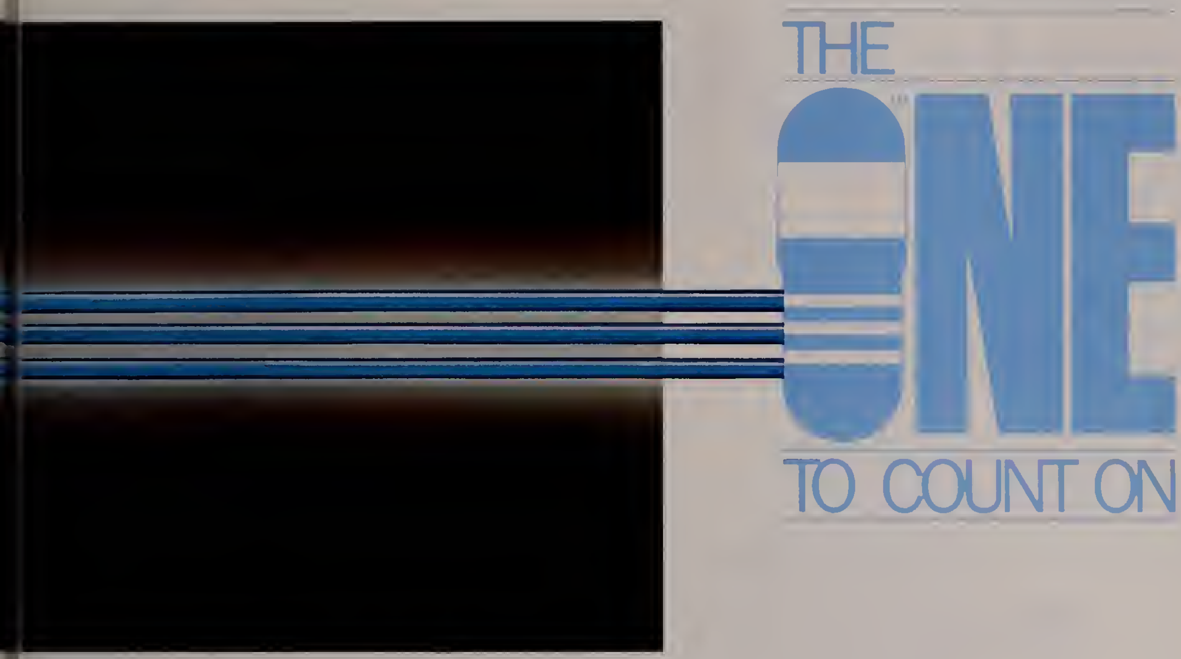
THE ONE
TO COUNT ON
FOR THE EXPERIENCE
OF INDERAL—

A unique controlled-release formulation offers effective 24-hour beta blockade

Regardless of pH or contents in the GI tract, INDERAL is diffused from small spheroids at a controlled and predictable rate.

Providing clinical results equivalent to tablets

In controlled clinical studies, a single daily dose of INDERAL LA provided the same therapeutic response as equivalent doses of conventional INDERAL tablets. While there is little correlation between plasma levels and clinical effect in hypertension and angina, blood levels achieved with INDERAL LA are usually lower than those achieved with an equivalent mg dosage of conventional INDERAL due to differences in hepatic metabolism.



WITH ONCE-DAILY DOSAGE

In hypertension, angina, and migraine

Smooth 24-hour control

Unsurpassed simplicity and convenience

Single daily dosage for enhanced patient compliance

ONCE-DAILY

INDERAL® LA

(PROPRANOLOL HCl) LONG ACTING CAPSULES

80 mg 120 mg 160 mg

The appearance of INDERAL LA capsules is a trademark of Ayerst Laboratories.

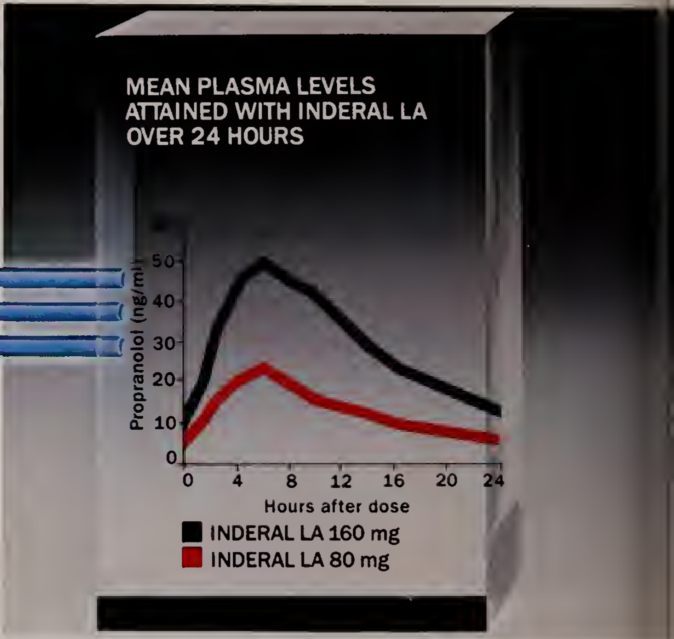
Please see last page for Brief Summary of Prescribing Information.

NEW

ONCE-DAILY

INDERAL® LA

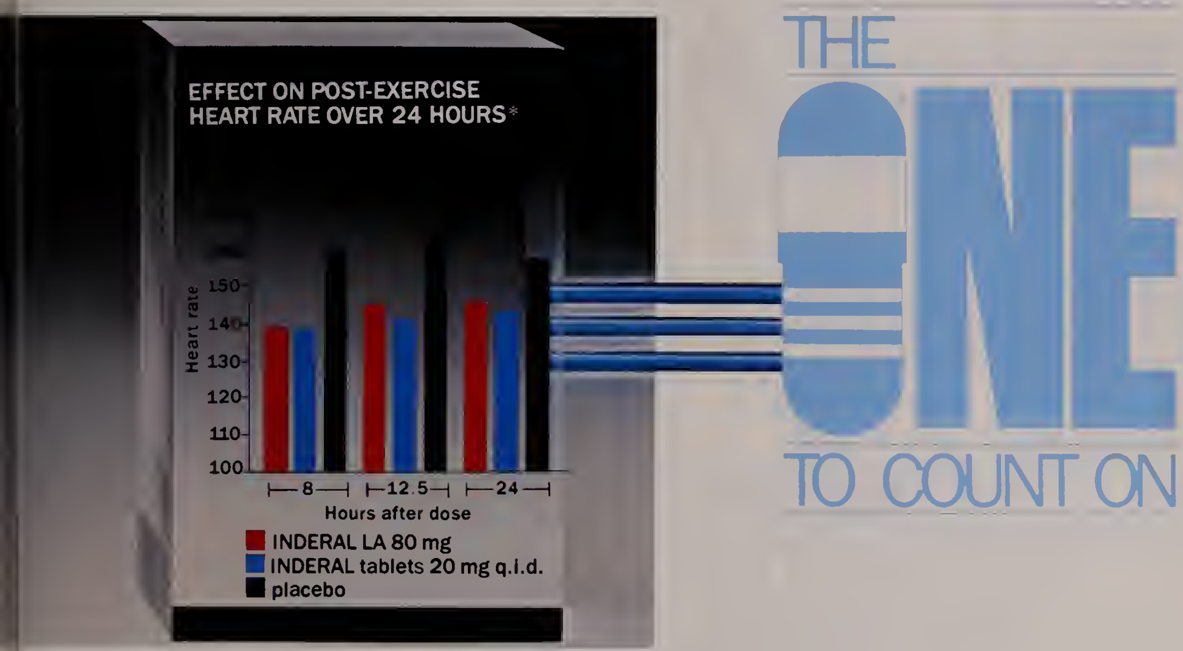
(PROPRANOLOL HCI) LONG ACTING CAPSULES



THE ONE TO COUNT ON FOR SMOOTH PLASMA LEVELS—

Sustained plasma levels

In pharmacokinetic studies, blood levels with once-daily INDERAL LA were found to be adequate to maintain sustained clinical effect throughout 24 hours. The unique controlled-release formulation of INDERAL LA minimizes differences between peak and trough plasma concentrations.



AND 24-HOUR BETA BLOCKADE

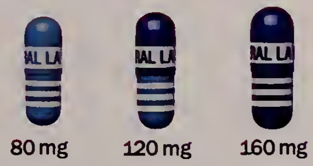
Provides therapeutic benefit throughout the day and night

In placebo-controlled trials, INDERAL LA was found to provide sustained 24-hour beta blockade as measured by decrease in heart rate, systolic blood pressure, and rate-pressure product. Patients taking once-daily INDERAL LA receive continuous protection from dose to dose—with therapeutic response equivalent to multiple daily doses of INDERAL tablets.

ONCE-DAILY

INDERAL® LA

(PROPRANOLOL HCl) LONG ACTING CAPSULES



The appearance of INDERAL LA capsules is a trademark of Ayerst Laboratories.

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*INDERAL LA vs. tablets: N.S. at all hours measured.

*INDERAL LA vs. placebo: $p<.05$ at all hours measured.

Please see last page for Brief Summary of Prescribing Information.

NEW

ONCE-DAILY

INDERAL® LA

(PROPRANOLOL HCl) LONG ACTING CAPSULES

THE ONE TO COUNT ON FOR INITIAL THERAPY IN HYPERTENSION

Start with 80 mg once daily

The usual initial dose is 80 mg INDERAL LA whether used alone or with a diuretic. Dosage may be increased to 120 mg or 160 mg once daily as needed to achieve additional control.

When converting patients from other beta blockers including INDERAL tablets, start with the nearest milligram equivalent of INDERAL LA once daily and evaluate clinical results to determine if dosage adjustment is necessary.

Unsurpassed convenience and simplicity

Enhanced patient compliance

AND ANGINA

Simplified core therapy begins with 80 mg once daily

Although individual patients may respond to various doses, the average optimal dose in angina pectoris is 160 mg once daily.

Compatible with other conventional antianginal therapies

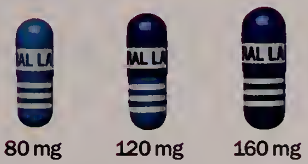
The experience and protection of INDERAL

Like conventional INDERAL tablets, INDERAL LA should not be used in the presence of congestive heart failure, sinus bradycardia, heart block greater than first degree, and bronchial asthma.

ONCE-DAILY

INDERAL® LA

(PROPRANOLOL HCl) LONG ACTING CAPSULES



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THE ONE TO
COUNT ON FOR
THE EXPERIENCE
OF INDERAL

NOW WITH ONCE-
DAILY DOSAGE

In hypertension, angina, and migraine—start with 80 mg once daily

Smooth 24-hour control

Unsurpassed simplicity and convenience

Enhanced patient compliance

Three strengths for prescribing convenience

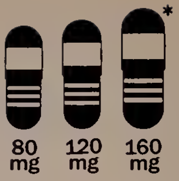
For arrhythmias, use conventional INDERAL® tablets

ONCE-DAILY
INDERAL® LA
(PROPRANOLOL HCl)
LONG
ACTING
CAPSULES

Ayerst®
AYERST LABORATORIES
New York, N.Y. 10017

Please see last page for Brief Summary of Prescribing Information.

ONCE-DAILY
INDERAL® LA
(PROPRANOLOL HCl) LONG ACTING CAPSULES



BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION. SEE PACKAGE CIRCULAR.)*
INDERAL® LA brand of propranolol hydrochloride
(80 mg, 120 mg, 160 mg Long Acting Capsules)

DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules

CLINICAL PHARMACOLOGY. INDERAL is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period

The mechanism of the antihypertensive effect of INDERAL has not been established Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity

In dosages greater than required for beta-blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential The significance of the membrane action in the treatment of arrhythmias is uncertain

The mechanism of the antimigraine effect of propranolol has not been established Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable

INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary

CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL

WARNINGS. CARDIAC FAILURE Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

> IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema) – PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS. General: Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose. There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: bradycardia; congestive heart failure, intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia, visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol

DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION – *Dosage must be individualized* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS – *Dosage must be individualized* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE – *Dosage must be individualized.* The initial oral dose is 80 mg INDERAL LA once daily The usual effective dose range is 160-240 mg once daily The dosage may be increased gradually to achieve optimum migraine prophylaxis If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS – 80-160 mg INDERAL LA once daily.

PEDIATRIC DOSAGE
At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

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New York, N.Y. 10017

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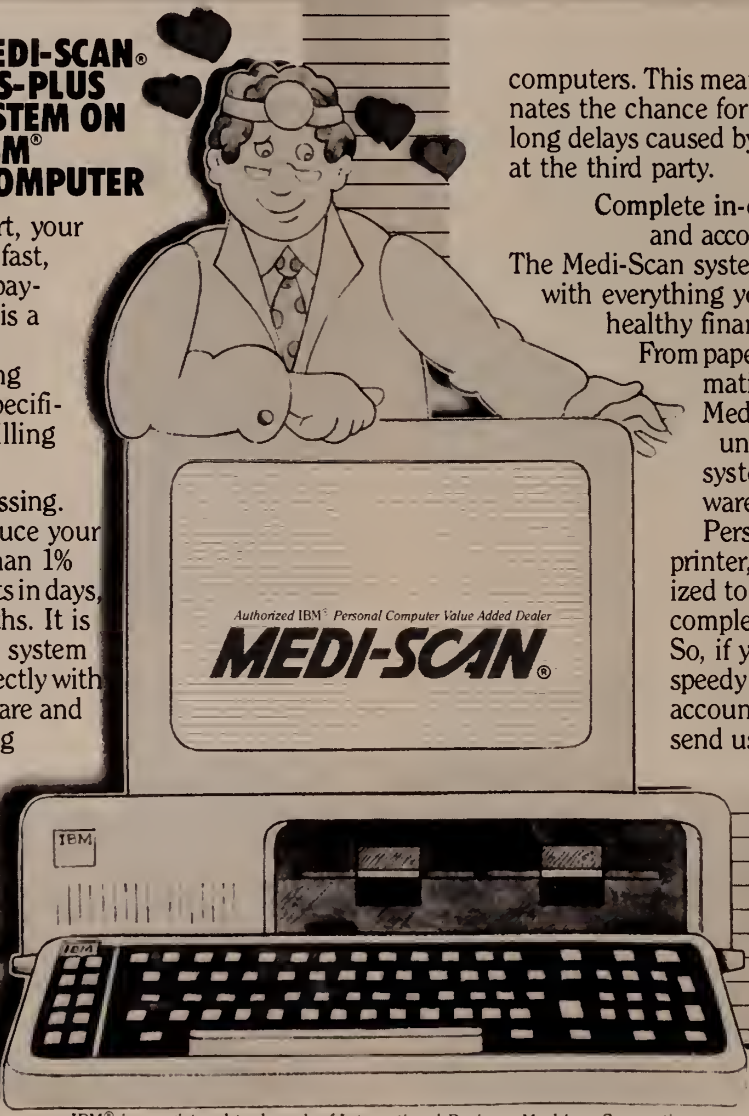
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NEW YORK STATE
JOURNAL OF MEDICINE

October, November 1983 • Volume 83, Numbers 11, 12

COMMENTARIES

Schistosomiasis: new therapies for an old disease

During the past several years, there have been revolutionary changes in the treatment of schistosomiasis. The older drugs, particularly the antimonials, which where toxic, administered parenterally over a long period of time, and only partially effective, have now been replaced by three newer drugs which are relatively free of serious toxic side effects, highly effective, and orally administered. These drugs, which were widely field-tested overseas during the 1970s, are metrifonate, oxamniquine, and praziquantel.

The report in this issue of the *Journal* by Rajkumar et al on the use of metrifonate in three patients with *Schistosoma haematobium* represents the first such report of its kind in the United States. It confirms the high rate of success with metrifonate reported by workers overseas. Their report also illustrates a number of important points regarding the treatment of schistosomiasis. The first of these is that prior to treatment the existence of an active infection must be demonstrated. It is not sufficient merely to demonstrate eggs in either the feces or urine or on rectal valve biopsy. The eggs must be viable, a fact that can be established by the presence of well-formed miracidia. Not infrequently, dead and calcified eggs are found, particularly in old *S haematobium* infections. Their presence is not an indication for treatment.

The second point stressed by the authors is the need to quantify the intensity of the infection by egg counts. These counts are extremely important in establishing the severity of the infection. During the period when toxic drugs were used to treat schistosomiasis, low egg counts indicating mild infections were grounds for withholding treatment since the drugs were more hazardous to patients than low-grade infections. The absence of toxicity in the three new compounds makes it possible to treat even low-grade infections. Thus the scientific consensus today is that even proven mild infections should be treated.

The three newer drugs differ in their effectiveness against the three human disease-causing schistosomes. And although they are extremely safe and effective, a number of the older drugs are still being used in various parts of the world. Dr. Rajkumar and his colleagues have provided a very fine overview of these older drugs and the problems associated with them. Their continued use in the Third World is often the result of availability, familiarity with use on the part of treating physicians, greater willingness of patients to tolerate untoward side effects, and lower cost. Gradually, however, the newer drugs are replacing them.

Oxamniquine is a tetrahydroquinolone that is specific for infections due to *Schistosoma mansoni*, particularly those acquired in the western hemisphere. It is less effective in treating similar infections acquired in Africa. Licensed by the Food and Drug Administration, oxamniquine is given in a single oral dose of 15 mg/kg of body weight after a meal. This dose is sufficient to clear up most *S mansoni* infections acquired in the western hemisphere. However, for similar infections acquired in Africa, doses as high as 60 mg/kg for two days have been necessary to achieve the same results. The commonest side effect associated with oxamniquine is dizziness that is usually mild, of short duration, and minimized by postprandial administration of the drug.

While African *S mansoni* infections are less responsive to oxamniquine than their western hemisphere counterparts, they are extremely sensitive to the newest of the antischistosome drugs—praziquantel. This combination of stereoisomers of pyrazinoisoquinoline ring structures is the most important of the three new drugs because it is effective against all three species of schistosomes as well as against a number of other helminthic infections for which there previously were no safe and effective remedies. Among these are *Clonorchis sinensis*, the Chinese liver fluke, and the lung fluke, *Paragonimus westermani*.

Praziquantel is given for both western hemisphere and African *S mansoni* infections as a single oral dose of 40 mg/kg. In *Schistosoma japonicum* infections, which were notoriously resistant to a number of the previously used drugs, a total dose of 60 mg/kg must be used, 20 mg/kg every four hours for three doses. Praziquantel's mode of action is not fully understood. What has been demonstrated is tetanic contraction of the helminthic musculature within minutes of contact with the drug. This is thought to play a role in killing the worms.

Nausea, vomiting, and abdominal pain have been reported after praziquantel use. But these side effects have generally been mild in nature and of limited duration.

Metrifonate, as demonstrated in the case series reported in this issue of the *Journal*, is highly effective against *S* *haematobium*. It is an organophosphorus compound that is an anticholinesterase, which is the basis of its killing action against schistosomes. It is only effective against *S. haematobium* and has no effect against the other species of schistosomes.

Metrifonate causes plasma cholinesterase levels to fall to less than 5% of pretreatment levels within six hours of treatment. But these levels rapidly return to normal within two weeks following treatment as was shown in two cases in this series. Erythrocyte cholinesterase levels fall to 50% of pretreatment levels and take from eight to ten weeks to return to normal.

Metrifonate is given in a total oral dose of 22.5 to 30 mg/kg of body weight, divided in three doses given every two weeks. This amounts to three doses of 7.5 to 10 mg/kg of body weight. The need to give three doses over several weeks is seen by some as having disadvantages, compared to praziquantel and oxamniquine which are either single-dose or multiple-dose over short periods of time. Still, one must not forget that tarter emetic (potassium antimony tartrate), long in use as the standard antischistosomal drug, had to be given intravenously over 29 days!

Metrifonate is well tolerated and only rarely produces transient and mild nausea, vomiting, and bronchospasm. Cure rates range from 70% to 80% and therapeutic failures can be retreated.

The development of the three newest antischistosomal drugs has relegated tarter emetic and the numerous other drugs once used to treat this disease to the shelves of history. Their ease of administration, the absence or paucity of side effects, and their high cure rates make these drugs suitable not only for treating individual patients, but also in mass control programs. Because of them it is now possible to reduce rapidly and safely the human reservoir of infection in control programs.

As with all new drugs, there remain unanswered questions about long-term side effects. Those familiar with previously used schistosomicidal drugs have special cause for concern because a number of these were eventually shown to be mutagenic. The final word will not be in on oxamniquine, praziquantel, and metrifonate for some time to come. Meanwhile, those involved with the treatment and control of schistosomiasis remain optimistic and hopeful.

PASCAL JAMES IMPERATO MD
Deputy Editor

The role of heart registries

Two of the most important observations made by Bailen-Rose et al. in their paper in this issue (p 1158) concern the decline in the incidence of rheumatic fever and rheumatic heart disease in native American children and the need for continuing a central registry of all school age children with cardiac diagnoses. Physicians who practiced medicine 25 years ago remember too well the large number of children hospitalized for long periods of time with rheumatic carditis and congestive heart failure, and the associated mortality. Then, cardiac clinics were attended predominantly by those with residual rheumatic heart disease since many of the infants with congenital heart disease did not survive or died during later attempts of corrective surgery. There is still no curative treatment for rheumatic fever and its manifestations once the disease process is initiated. Yet, we can look with pride at the declining incidence of this disease and know that prevention is working. The educational efforts put forth by the various heart associations and by the rheumatic fever registries and the state distribution of rheumatic prophylaxis have played major roles in helping to prevent this debilitating disease.

In the Manhattan Heart Registry, the incidence of children with residual heart disease among the total number with a history of rheumatic fever or evidence of prior rheumatic fever is relatively high. Previous studies have indicated that residual rheumatic heart disease is found in approximately 30% of children with the first attack, 60% after the second attack, and 75% after the third attack.[1] This high incidence of rheumatic heart disease in the Registry suggests that either a significant number of children who have had rheumatic fever without residual heart disease has been lost to follow-up and has not been reported to the Manhattan School Health Service or that the registered cases have had multiple attacks of rheumatic fever. I would suspect the former explanation is true. Even taking into account the decline in the school-age population in the Manhattan borough, the reported incidence of children with congenital heart disease per 100,000 is low compared with that found in five-year-old children in other studies.[2]

With the recognized success in the prevention of rheumatic fever, complacency may become a dangerous spin-off. The authors note that the return of student health forms reporting medical problems has decreased to 45%. One must presume that there are additional children who have had rheumatic fever in the borough but are not included in the Manhattan registry. Parents may have become less diligent in seeking proper diagnosis and treatment of acute pharyngitis in their children, in continuing rheumatic prophylaxis in children who have had rheumatic fever, and in continuing the medical follow-up of their children with residual rheumatic heart damage. Because of the recent influx of a large number of Caribbean and Latin American children into the metropolitan areas of this country, a significant rise in the incidence of rheumatic fever and its sequelae is predictable. Many of these new American children are living in crowded housing with exposure to unfamiliar serotypes of group A streptococci and have inadequate medical care. Now is the time for vigilance if we are to maintain the reported success in the prevention of initial attacks of rheumatic fever and of recurrent rheumatic fever and in the decline of mortality due to rheumatic carditis. Heart registries should play an important role in the identification and follow-up of children with congenital heart disease, with or without surgical correction, who need prophylaxis against bacterial endocarditis and who frequently need help in the psychologic and physical integration into the school populations. In the larger metropolitan areas, an increase in educational efforts, maintenance of heart registries by state and federal agencies, and the continued distribution of rheumatic prophylactic antibiotics by state health departments are important to all children with heart disease. The shifting winds of funding by federal and state agencies cause great concern that the success in prevention may not be maintained.

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Verapamil in atrial fibrillation

Calcium antagonists constitute a group of drugs recently approved by the FDA that present a new and effective approach to the therapy of supraventricular arrhythmias and angina pectoris. As so often happens with new drugs, the wave of enthusiasm is followed by a trough of untoward reactions which limits in varying degrees the extent to which the new therapy can be employed. The case report presented by Clark and Dwyer represents such an untoward response to the intravenous (IV) use of verapamil.

The therapeutic effect of this drug in atrial fibrillation is to block impulses traversing AV junctional tissue. Although the hope for reversion to sinus rhythm occurs only in a small percentage of cases, the drug has proved to be quite reliable in slowing ventricular rate.

However, its negative inotropic effect has become evident and is not surprising in view of the fact that it provides slow channel calcium blockade and indirectly affects the flux of the intracellular calcium pool within the myocardial fiber and thus its contractile ability. In fact, it is more surprising that it has not produced more side effects of this nature.

It is clear that caution must be used in treating supraventricular arrhythmias with intravenous verapamil in patients who manifest or who have manifested signs of left ventricular failure. Chew et al[1] emphasized that the use of intravenous verapamil in the presence of a markedly reduced left ventricular ejection fraction or a substantially elevated (20 mm Hg or greater) pulmonary capillary wedge pressure may be followed by a rapid increase in wedge pressure, dyspnea, and further congestive failure. Clark and Dwyer suggest another complicating factor, that of electromechanical dissociation.

It has been noted in several studies that the use of an IV bolus of verapamil is followed frequently by a short period of hypotension.[2,3] It may be that this effect is also the result of its negative inotropism. Another caution relates to its use in treating atrial fibrillation in the presence of a pre-excitation syndrome.[4] Some patients have developed an acceleration in ventricular response to the use of verapamil instead of the usual slowing.

Clark and Dwyer have noted an episode of electromechanical dissociation which appears to represent the extreme effect of verapamil in its calcium blockade. They have indicated that the amount of verapamil used and the rate of its injection are significant parameters in the production of adverse effects. Another factor to keep in mind is the time lag of five to ten minutes between the peak serum concentrations and the peak cardiac effects.[5] Consequently, IV boluses should not be given at intervals of not less than 15 to 20 minutes.

Even though verapamil has been used successfully in slowing the ventricular rate of atrial fibrillation with a rapid ventricular response, it would seem the better part of valor to employ electrical cardioversion in treating the subset of patients with congestive heart failure.

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The *Journal* welcomes and encourages letters to the editor. Letters should be succinct and precise. Preference for publication will be given to those not exceeding 450 words. Letters must be typewritten and double-spaced, with six or fewer references. The references should be based on the style used in *Index Medicus.* Letters should not duplicate manuscripts or correspondence submitted to other journals, newspapers, or magazines. The signature, academic degree, professional affiliation, and address of each author must be included. Every effort will be made to expedite the publication of accepted letters. All letters are personally acknowledged by the editor.

Address letters to Editor, New York State Journal of Medicine, 420 Lakeville Road, P.O. Box 5405, Lake Success, New York 11042.

Values and valuables

TO THE EDITOR: David Maeir's article "The Physician as a Man . . . the Man as a Physician: A Jewish viewpoint" (*NY State J Med* 1983; 83:813–816) reflects a thoughtful and refreshing engagement with signally important issues of ethics and human values in the philosophy and practice of medicine. And his references to the positive attitude toward medical care on the part of traditional Judaism will, I'm sure, be enlightening to many of your readers. But I must strongly take issue with one assertion of Dr Maeir's: viz, that "the ethical and moral values based on Jewish religious tradition have persisted and are widely accepted in today's very secular environment. Theologically inspired truths and principles that have inherent value," he continues, "apparently do not need divine reinforcement in order that they continue to be considered valid."

I cannot see that Jewish ethical teachings, when properly understood in all of their richness and depth, can be said to be accepted, let alone observed, in today's secular society, whether among physicians or in the general population. In fact, most Jews and non-Jews, unless they have seriously studied Jewish law, are not even aware of the actual content of Jewish ethical prescriptions.

Jewish law provides, for example, that within the Jewish community, one must loan money without interest to anyone in need and must give *at least* 10% of one's income to the poor. Are these norms "accepted" in a society that considers helping those in need a purely voluntary, even if desirable, expression of "charity"—whose performance, to any degree or no degree, is entirely at the giver's discretion?

Jewish law prohibits buying stolen goods, yet many people today gladly purchase items at discount prices from known fences. Similarly, many current advertising and selling practices—on the part of individual transactors, small merchants, and giant corporations alike—are proscribed by Jewish laws against deception, as are the dishonest methods of many lawyers. Finally (in this series of examples), Jewish law sets strict limits on permissible profit margins with respect to necessities of life, such as food—limits that are surely not observed in "today's secular environment."

Which brings us to the question of the financial practices of physicians themselves. The Jewish physician's "Daily Prayer," so ennobling as quoted by Dr Maeir, asks that God "not allow thirst for profit or ambition for renown and admiration to interfere with my profession"; does Dr. Maeir know many physicians for whom these are, not distractions, but rather primary or at least significant motivations for practice? The prayer asks for health and strength so that the physician can "cheerfully help rich and poor," but most primary care physicians and orthopedic surgeons alike, in my experience, simply quote a (usually very high) fee at the time of an appointment; one's financial status or ability to pay is not inquired into, nor seen as properly the physician's business (that is, his problem).

The Talmud advises us to "know from what you came, where you are going, and before Whom you will have to give an accounting." In the absence of the sense of "creaturehood"—and of the acknowledgment of a greater Other—that this verse expresses and that the religious tradition seeks to inculcate, people seem little compelled to study, let alone practice, the detailed ethical blueprint laid out in traditional Judaism. Dr Maeir's assertions to the contrary would seem, on the evidence, to be unsupported.

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The writer was producer and host of the Yedid Nefesh (*"Friend of the Soul"*) *radio program on Jewish values and culture, which aired for five years in New York City.*

In reply: I intended to emphasize that our primarily secular society has chosen to base its moral outlook and regulation on Judaic sources; this because of their deep inherent and proven value. I see this as a "compliment" to Judaism. Secular religions, such as the Ethical Culture movement, are also essentially Judaic in origin. Secular Humanists such as Erich Fromm (*vide You Shall Be As Gods*) base their ideas on Jewish sources as well. This is a further expression of the fact that society has not yet produced any better code than that which forms the basis of our Judeo-Christian heritage.

The "autonomy of morality and ethics" is not a question raised only in modern times. An extensive discussion of this issue is reflected in Talmudic writings over 1,800 years ago. For the reader interested in further information on this subject, I would suggest E. E. Urbach's *The Sages: Their Concepts and Beliefs*, Jerusalem, Magnes Press (Hebrew and English editions.)

Unfortunately as Mr. Cohen does indicate, the existence of moral codes in religious and secular societies does not in our time seem to be very effective in preventing the patterns of immoral action that Mr. Cohen describes. They exist among the religious and the nonreligious, among the "believers" and the secular, and among sailors, plumbers, and lawyers as well as among physicians.

That we fail to teach and transmit these values does not reflect on their truth.

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A boycott of Squibb

TO THE EDITOR: At the spring meeting of the Florida Chapter of the American Academy of Pediatrics and the Florida Pediatric Society, a resolution calling for a physician boycott of products manufactured by the Squibb Corporation passed unanimously. Florida pediatricians, who have become increasingly concerned about the epidemic of adolescent drug use, took this unusual action to protest the pharmaceutical company's sale and promotion of a perfume with the name Opium. Prior to the vote, Society members reviewed written replies from Richard M. Furlaud, Chairman of Squibb, and Martin H. Schmidt, President of Yves St. Laurent Parfums, the subsidiary responsible for United States distribution of Opium. Furlaud acknowledged the product name "might be in poor taste, and was indeed offensive to many." Poor taste extends beyond the use of a suggestive name: early advertisements pictured a euphoric young lady above a caption inviting the reader to "share with us the sensuous embrace of Opium."

A number of reasons were offered as justification for use of the name. Principal among these was the fact that the perfume had become very popular and was profitable. Mr Schmidt commented that at $160 an ounce, Opium is beyond the means of young people. Yet the fragrance is sold in equally distinctive packaging as cologne for $27 or body location for $22. Prior to the advent of designer jeans, high-priced products advertised in fashion magazines might have resulted in few adolescent patrons. Squibb attempted to reassure the Society that it was better to have Opium in their hands than in the hands of less reputable manufacturers. Yet less prestigious distributors are not likely to have financial backing sufficient to produce sophisticated advertisements in fashion magazines such as *Harper's*, *Vogue*, or *Glamour*. And the financial success of Opium has spurred the introduction of products called Stash, Sinsimella, and Cocaine by the very operators Squibb disdains.

Squibb believes its product does not in any way contribute to the legitimization of an addictive drug. William Pollin, MD, Director of the National Institute on Drug Abuse, disagrees. Dr Pollin wrote in support of the Florida resolution,

> I think your campaign with regard to Opium is an important one and more significant than might otherwise seem the case. There is substantial evidence to indicate that inadvertent choices made by various American communication media—the record industry, the movie industry, as well as other types of private enterprise—in the 1960's and the early 1970's contributed to the popularization and acceptance of the notion of illicit drugs. I believe it is most important at this time that we not permit or encourage the reappearance of such legitimization by major American corporations. It is for that reason that I strongly support your proposed initiative.

Although Squibb may believe that the answer to drug abuse lies in government action and spending, Florida pediatricians feel that all citizens have a responsibility, especially those of us who care for children as physicians and parents.

I personally ask the support of physicians from the State of New York in the boycott of Squibb products by prescribing acceptable substitutes.

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Normal-pressure hydrocephalus associated with markedly elevated CSF protein

TO THE EDITOR: The syndrome of normal-pressure hydrocephalus was first described by Hakim and Adams in 1965,[1] and subsequently numerous articles have referred to this unusual clinical condition. The full-blown syndrome consists of progressive gait disturbance, urinary incontinence, and progressive organic mental syndrome.[2]

In most instances, no definite cause can be established for the syndrome. However, cases have been reported which have been attributed to subarachnoid hemorrhage,[3] trauma, and meningitis.[2] It has been postulated that in these cases, blood or purulent material has acted to increase the resistance of CSF flow across the arachnoid villi.

We recently had the opportunity to examine a patient who had the classic syndrome of low-pressure hydrocephalus in association with a markedly elevated CSF protein. The protein elevation was in association with a lumbar area ependymoma.

Case report. A 59-year-old man had a history of three years' progressive gait disturbance in the form of an ataxia. Over the previous three months, he developed urinary incontinence, and over the last six months, he developed a mild but distinct organic brain syndrome. Neurologic examination strongly suggested a low-pressure hydrocephalus syndrome, and a CT scan was performed. The scan was consistent with the diagnosis of low-pressure hydrocephalus; there was marked ventricular dilatation with concomitant normal sulci over the hemispheres. Subsequent to this, an indium 111 DTPA* cisternogram was performed, which was also consistent with the diagnosis of normal-pressure hydrocephalus (Fig 1). CSF was removed at the time of injection of the Indium and was noted to be straw-colored. The CSF protein value was 1,020 mg/dL. Search was initiated for the source of the elevated CSF protein, the x-rays of the lumbar spine revealed widening of the canal consistent with a mass in that area. The patient had a CT scan which confirmed the presence of a mass in the lumbosacral area (Fig 2). Surgery with removal of the lumbar canal ependymoma was performed.

The patient has been followed for two years; his gait and organic mental syndrome have improved and his incontinence has ceased. No evidence or recurrence of the ependymoma has been noted.

Discussion. It was thought that in this particular instance the patient had developed a low-pressure hydrocephalus syndrome due to increase of resistance to CSF flow across the arachnoid villi in association with markedly elevated CSF protein. This would be a situation similar to that occurring in patients having low-pressure hydrocephalus in association with subarachnoid bleeding.

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* Diethylenetriaminepentaacetic acid.

Dr. Lusins is now with A. O. Fox Memorial Hospital, Oneonta, NY 13820.

(Figures on next page.)

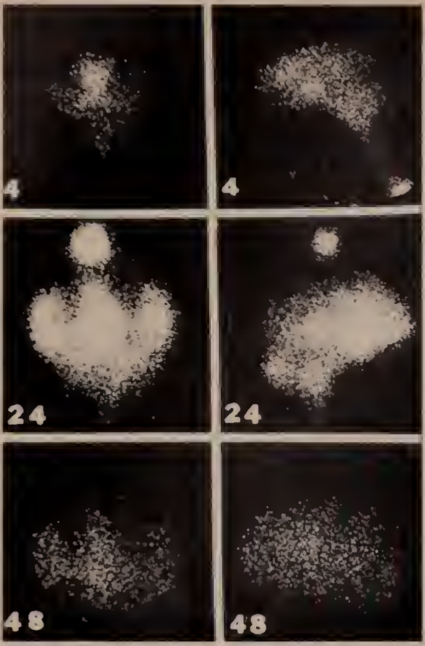

FIGURE 1. Cisternogram performed with indium 111 DTPA. Views taken at 4 hours show reflux into the lateral ventricles. At 24 hours, indium has not ascended over convexities. At 48 hours, indium still has not ascended over the convexities. Pattern is consistent with normal pressure hydrocephalus.

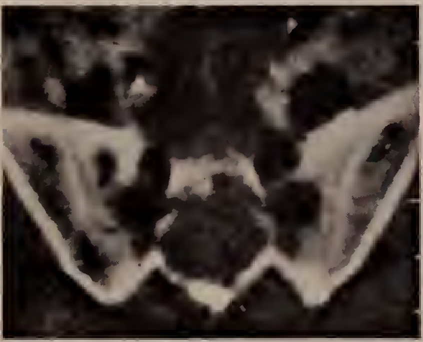

FIGURE 2. CT scan of same lumbar area shows marked enlargement of canal and soft-tissue density in canal.

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'Of mice and men'

TO THE EDITOR: I read with interest the article, "Role of pulmonary surfactant system in lung diseases of adults," by Fred B. Smith, MD (*NY State J Med* 1983;83:851-856).

He very well described the limitations of conducting studies in living human beings and indeed (p. 852) stated, "It is clear that animal experiments . . . will be a major means of gaining knowledge of the involvement of the surfactant system in lung injury."

It is for this very reason that I remain a bit perturbed by Dr Smith's statement (p. 855), "There is evidence that corticosteroids may promote surfactant lipid synthesis in type II cells of the adult lung[90] and may affect the response of type II cells following alveolar injury.[91]" A brief glance at the references discloses that the "adult lung" studied is that of a *rat* and reference 91 refers to a study done on *mice.*

Notwithstanding Dr Smith's caveat about the use of animal studies to study this field (p 852), I believe that the "animal in question" should be more clearly identified in the text. The use of the words "adult lung" in a journal of human medicine is misleading since "human" adult, at least for this reader, is implied unless otherwise stated. Furthermore, I question the merit of citing experimental data of two animal species in the same sentence without specifying the animals.

Thus I feel that more precision in identifying the animal in question (rats, mice, humans) is warranted, especially when publishing a paper in a journal of human medicine.

Overall, I enjoyed reading the article which presented much information culled from numerous specialty journals—which I would never have had a chance to read (cf p. 804 "we are suffering from a diarrhea of words"—Angrist)—in a nice, terse manner.

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In Reply: I regret that Dr Kaufman finds the statements cited in the latter part of my article to be misleading. He correctly points out that the evidence referred to was drawn from experiments on animals of two different (nonhuman) species. The pulmonary surfactant system, like all biologic systems, is subject to interspecies variation; differences in composition of alveolar lavage lipids[1] and in ultrastructure of type II cells[2] are well-studied example, and species differences in metabolism of type II cells are just beginning to come to light.[3] I should point out, however, that the statements were made in the context of an article intended as a brief summary of a field rather large in scope, which remains relatively unexplored and not well represented in the clinical literature. I attempted to warn readers of this state of affairs in my introductory comments, where I stressed the preponderance of animal-based studies and included the statement that results of work with adult human type II cells had not been published. Thereafter, I avoided reference to particular animal species in the interest of brevity and readibility, where it did not appear necessary to qualify a conclusion. The statements Dr Kaufman mentions, for example, were intended to convey only the rather broad notion that corticosteroids may in *some* way affect the behavior of type II cells in the mature organism, granting that the nature of the effects might be different in rats, mice, and humans. (This is in contrast to the situation in late fetal lung development, where the specific influences of corticosteroids have been well studied in a variety of species[4] and indications for therapeutic use in humans defined[5]).

I appreciate Dr Kaufman's closing remarks. I share with him and my former chief a concern for the proliferation and scattering of verbiage in the current medical literature.

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Missed opportunities for cervical cancer screening

TO THE EDITOR: The true test of a cervical cancer prevention effort is to eradicate cases of and deaths from invasive disease. Cervical cancer screening using the Papanicolaou smear is considered an effective method for early detection of this disease. However, approximately 600 new cases and 250 deaths from invasive cervical cancer are reported annually to the New York State Cancer Registry. These statistics raise several questions about screening. One of them is whether the lack of screening can be attributable to women not presenting themselves for screening or to physicians for not providing the screening.

During the spring of 1982, a population survey was conducted in Upstate New York. Its purpose was to collect baseline data on utilization levels of cancer screening for several sites. A random sample was selected from the most recent list of licensed female drivers who reside in New York State, but not New York City, and who were between the ages of 25 and 74. A questionnaire was mailed with a cover letter and business reply envelope to 2,681 women. Three women who had died, 48 who had moved without a forwarding address, and 32 nonrespondents who did not claim the final mailing of the questionnaire at the post office were removed from the sample. Thus, after three follow-up attempts by mail, 77% (N = 2,010) of those who received a questionnaire (N = 2,598) returned a completed form.

One objective of the survey was to note medical care utilization of women who did not report having had a Papanicolaou smear within three years. Of particular interest were visits to health services where a Papanicolaou smear could have been provided with little additional resources. These included hospitalization, physician visit for a check-up, physician visit when sick, a venereal disease clinic, a contraceptive clinic, and a pregnancy-related service. A "missed opportunity" was defined as at least one visit within the last three years to one of these services by a woman who reported she had not had a Papanicolaou smear within the same three-year period.

Negative three-year Papanicolaou smear histories were reported by 21% of the respondents (N = 414). Women who had undergone hysterectomy accounted for 29% percent of these negative histories. When considering health service utilization of the unscreened women with intact uteri, 65% of them had made at least one visit to at least one of the services listed above. Thirty percent of these same women had visited two or more of the different services.

These survey data suggest that a contributing factor to the number of cases with advanced disease could be missed screening opportunities. However, several limitations of the data must be recognized. The data are self-reported and were not validated by medical history or laboratory records. In addition, due to the wide range of cancer screening services covered by the survey detailed questions concerning contraindications for Papanicolaou smear screening were not possible. Only hysterectomy status at the time of the survey was considered. Finally, the sample was drawn from residents who are licensed to drive. In 1980, 91% of the residents of Upstate New York age 18 and older held an active New York State driver's license. This proportion was determined by dividing the number of active licenses in force (originals and renewals) for persons over 18 years old by 1980 census totals of residents over 18 years old.

Another study is being planned to obtain more information about missed opportunities and to overcome some of the present study's limitations. It certainly seems to be in the interest of high risk women to transform missed opportunities into screening opportunities.

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Giant colonic diverticulum

TO THE EDITOR: We read the recent report by Patel and Diab[1] on giant colonic diverticulum with great interest. We have recently treated a patient with free intraperitoneal perforation of a giant diverticulum.

Case report. A 50-year-old woman had an asymptomatic left lower quadrant mass detected during routine gynecologic examination. She received cascara in preparation for barium enema. Afterward, she began to experience lower abdominal cramping pain and loose stools, but no other symptoms.

Barium enema five years previously revealed diverticulosis. She recently completed chemotherapy following mastectomy for carcinoma.

Vital signs and examination on admission were normal except for exquisite tenderness over the lower abdomen. A suprapubic mass was palpable. Bowel sounds were present and there were no peritoneal signs. Rectal examination revealed anterior tenderness, but no mass or occult blood.

The WBC count was 8,100 with 11% band forms. Blood chemistries, EKG, and chest x-ray were normal. Abdominal x-ray revealed large gas shadows superimposed over the sacrum. Sigmoidoscopic examination was normal to 15 cm. Barium enema revealed sigmoid diverticulosis as well as a large air-filled diverticulum in the mid-sigmoid region. Pelvic sonogram revealed a poorly defined structure superior to the uterus.

Several hours after admission, her temperature rose to 101.9°F. Her pain was now maximal in the left lower quadrant. Examination revealed extreme tenderness in this area as well as nonvoluntary guarding and rebound tenderness. At this time, the WBC count was 12,100 with 33% band forms. Abdominal films showed free intraperitoneal air.

Emergency laparotomy showed a 15-cm mass along the antimesenteric border of the mid-sigmoid colon. The mass was densely adherent to the uterus and sigmoid colon. A large perforation was evident in a necrotic anterior wall of the giant diverticulum. There was a small amount of barium within the diverticulum and communication with the sigmoid colon was apparent. The diverticulum and adjacent sigmoid colon were resected and sigmoid colostomy and mucous fistula were created.

Pathologic examination revealed obvious inflammation and necrosis. The wall was composed of fibrous elements only. The patient's postoperative course was complicated by pulmonary edema which responded to diuretics and digitalis. She was discharged 15 days after admission.

Discussion. This case exhibits many of the common features reviewed by Patel and Diab.[1] One other instance of free intraperitoneal perforation has been reported.[2] The onset of symptoms was temporally related to the oral cascara. Free perforation became obvious several hours after sigmoidoscopy and barium enema. It is difficult to implicate these events as a direct cause of the perforation. However, it would seem prudent in a patient experiencing acute symptoms attributable to a giant diverticulum, to defer manipulations if possible. Physicians should be alert to this complication in patients undergoing work-up for this condition.

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An ominous law on autopsies

TO THE EDITOR: At a recent meeting of forensic pathologists I learned that the New York State Legislature had slipped through a bill which severely limits the medical examiners and coroners in their ability to investigate and determine the causative factors and effects of violent or sudden death.

How could such a bill slide by the legislative watchdogs of organized medicine and local government?

The bill, which restricts the use of the autopsy as an investigative tool, raises an interesting legal question. How may a coroner or medical examiner determine the factual cause and manner of death in a timely and reasonable fashion (the duty of such an official) when the tool most frequently depended upon in the decision process, the autopsy, is restricted? That authority should be commensurate with responsibility is an old-time legal maxim. Did the Legislature also include a diminution of responsibility when the authority was restricted? I doubt if anyone ever thought of that.

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Medical implications of nuclear war

TO THE EDITOR: The Council of the MSSNY has taken an important public health position which deserves the urgent attention of the membership. The Council stated that

> no adequate medical response to nuclear war is possible, and that the ultimate decision regarding a response to the implications of nuclear weapons and nuclear war is up to each individual physician's conscience.

The fact that no adequate medical response to nuclear war is possible is a valid conclusion based on the available information. If there were no other studies available, one could extrapolate from the tragedies of Hiroshima and Nagasaki, taking into consideration the enormous number of nuclear warheads now poised for delivery and detonation. The World Health Organization recently declared, "There is no health service on earth geared to, or capable of giving care to the injured of a nuclear war."

The Council's position statement further points to each individual physician's conscience for an ultimate decision regarding a response to the implications of nuclear weapons and nuclear war. Since physicians are dedicated to the promotion of health, the prevention and treatment of illness, and the relief of suffering, the individual physician's conscience can lead to only one realistic conclusion. As the Pontifical Academy of Sciences, in a study commissioned by Pope John Paul II, reported, "Recent talk about winning or even surviving a nuclear war must reflect a failure to appreciate a medical reality: Any nuclear war would inevitably cause death, disease and suffering of pandemic proportions and without the possibility of effective medical intervention. That reality leads to the same conclusion physicians have reached for life-threatening epidemics throughout history. Prevention is essential for control."

The MSSNY has had a long and honorable tradition of acting as the collective conscience and voice of its members. Organized medicine can and should take a responsible leadership role in the face of this threat to the very survival of our people.

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Some thoughts on AIDS

TO THE EDITOR: What do we really know about this new disease? What I hear and read about AIDS seems to be mostly speculation. Is it an infectious entity as lately often stated? I have come to have some doubts; for it must be a curious infection which clandestinely destroys the body's defense mechanisms created precisely to fight infections.

It stands to reason that people without those firstline defenses are in grave danger of being overwhelmed by almost any infection. But is AIDS in itself an infectious disease or are perhaps other factors involved?

We know that a newborn has inherited some immunity against a number of diseases. Before the era of multiple prophylactic immunizations, practically every child would acquire measles, an occurrence expected by the parents and usually overcome by the child without serious consequences because it had acquired immunity against measles in the womb. But let's look back to the past century where a passenger ship, harboring a child with measles, touched the isolated Faeroe islands in the far north of Scotland. Measles spread through the Islands as deadly as the plague and decimated the population. Measles were unknown in the Faeroes, and the children there had been born without any immunity to the disease.

Here we have a clear case of inherited immune deficiency. But with AIDS there is talk about the loss of acquired immune power, or perhaps rather of the lack of acquiring immunity. Debilitating factors such as chronic illnesses and drug abuse might weaken the body's immune defenses, but I think another factor should be considered: The over-use of antibiotics.

Children are exposed to infections from the day of birth and suffer frequently from tonsillitis and otitis media. With the advent of penicillin forty years ago (and the sulfas even before) it became evident that infections could be nipped in the bud. And nipped they were. After an injection of penicillin a child did not have to suffer for a prolonged time, and the mother was saved from the agony of sleepless nights. But after only a few years I, among other physicians, saw a growing number of preschool children coming down with tonsillitis and otitis media more frequently than before the advent of antibiotics. I believe that those children had not acquired the needed immunity because they never had to fight those diseases: the antibiotics did it for them. When mothers asked me for penicillin right away, I tried to explain my objection and asked them to bear the burden of a sick child for two or three days, pointing out that there would be still time to use penicillin if needed. A whole generation has now grown up with antibiotics applied by mouth or injection from the first year of life. I cannot help wondering whether AIDS is an infectious entity or rather a syndrome in which lack of acquired immunity may be an important factor.

Without doubt antibiotics are our most important weapon in the fight against infectious diseases, and to practice medicine without them would be unthinkable. There are limitations which have been pointed out frequently in the literature. But I do not recall hearing any warnings about overuse in infancy and early childhood with the view that antibiotics might interfere with the natural formation of immunity. Such oversight might have occurred due to a lack of visible adverse signs and perhaps also the unpleasant thought of an iatrogenic factor.

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Metrifonate in the treatment of *Schistosoma haematobium* infection

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ABSTRACT Metrifonate, recently introduced for the treatment of schistosomiasis, has been reported to act selectively against *Schistosoma haematobium* infections. *S haematobium* eggs were found in direct microscopic examinations of the urine from two children who had gross hematuria, and one adult who had intermittent hypogastric pain, episodes of urinary tract infections, and prostatitis. All were treated with metrifonate. In the children, plasma cholinesterase returned to 90% of the pretreatment levels sooner (two weeks) than erythrocyte cholinesterase (four weeks). Daily egg counts beginning 21 days prior to treatment revealed that their numbers had dropped precipitously by the seventh day following the first treatment. Dead eggs began to appear from day 21, and by day 28 all of the eggs were dead. Metrifonate appears to be an effective curative agent in the treatment of urinary schistosomiasis.

(NY State J Med 1983; 83:1155–1157)

(*See also Commentary p 1147.*)

INTRODUCTION

Schistosomiasis is an important infectious disease that affects at least 200 million people throughout the world.[1] Although it is not endemic to the United States, it is seen here as a disease of both immigrants and US travelers. Metrifonate (Bilarcil), an organophosphorus compound recently introduced in Europe[2,3] and Africa,[4] for the treatment of schistosomiasis, appears to have selective activity against *S haematobium*. Since documentation of its use is not reported in American literature, our experience in treating urinary *S haematobium* infections with metrifonate in two children and one adult is reported below.

PATIENTS AND METHODS

Case 1. An 8-year-old girl, born in the United States to parents from Ghana, had gross hematuria of seven days' duration. The child had recently returned from Ghana, where she had lived for six years. Physical examination was essentially within normal limits. Urinalysis showed 3+ protein, numerous white blood cells, and 20 to 30 erythrocytes per high power field. Direct microscopic examination of the urinary sediment revealed viable *S haematobium* eggs. The BUN and creatinine levels were within normal limits. An intravenous urogram was normal except for irregularities on the superior wall of the bladder. Routine stool examinations and an indirect fluorescent antibody test for schistosomiasis were performed.

Case 2. The 5-year-old brother of patient 1, who had lived in Ghana for the past three years, also had gross hematuria of seven days' duration. The child's growth and development were within normal limits. Urinalysis revealed 4+ proteinuria, numerous white blood cells, and 30 to 40 erythrocytes per high power field. The finding of viable *S haematobium* eggs in the urinary sediment established the diagnosis. The BUN and creatinine levels were within normal limits. An intravenous urogram showed simple ureterocele abnormality. Stool examinations for ova and parasites and an indirect fluorescent antibody test for schistosomiasis were performed.

Case 3. A 28-year-old man, born in Cairo, Egypt, was admitted to the hospital. For the past few years he had experienced intermittent pain in the bladder region, accompanied by episodes of urinary tract infections and prostatitis. He had been treated for bilharziasis at the age of 7 years. There were no abnormal physical findings except a mild suprapubic and prostatic tenderness. Microscopic examination of urine revealed *S haematobium* eggs, erythrocytes, epithelial cells, and pus cells. Intravenous pyelography revealed slight trabeculation of the bladder mucosa, particularly of the right side and the dome. Borderline nonobstructive dilation of the pelvic segment of the right ureter and normally functioning kidneys were noted. Cystoscopy showed scattered prominent flat as well as elevated nodular yellow-red lesions, mainly in the posterior wall and dome.

Plasma and erythrocyte cholinesterase levels. Base levels of plasma and erythrocyte cholinesterase were obtained from patients 1 and 2. Levels were also determined before and eight hours after the second course of treatment.

Treatment. Patients 1 and 2 each received a single dose of 10 mg/kg of metrifonate biweekly for a total of three doses. Patient 3 was treated with 100 mg per dose.

Egg quantitation data. In patients 1 and 2 quantitative egg counts were carried out daily beginning 21 days prior to treatment and continued for 102 days. Both total egg counts and egg numbers per milliliter of urine were determined before and after treatment by sedimentation of 24-hr urine specimens and counting four 10-μL aliquots. One quantitative egg count was made before treatment on a 24-hr urine collection from patient 3. Prior to the administration of metrifonate (made available by Centers for Disease Control, Atlanta, GA), informed consents, and ap-

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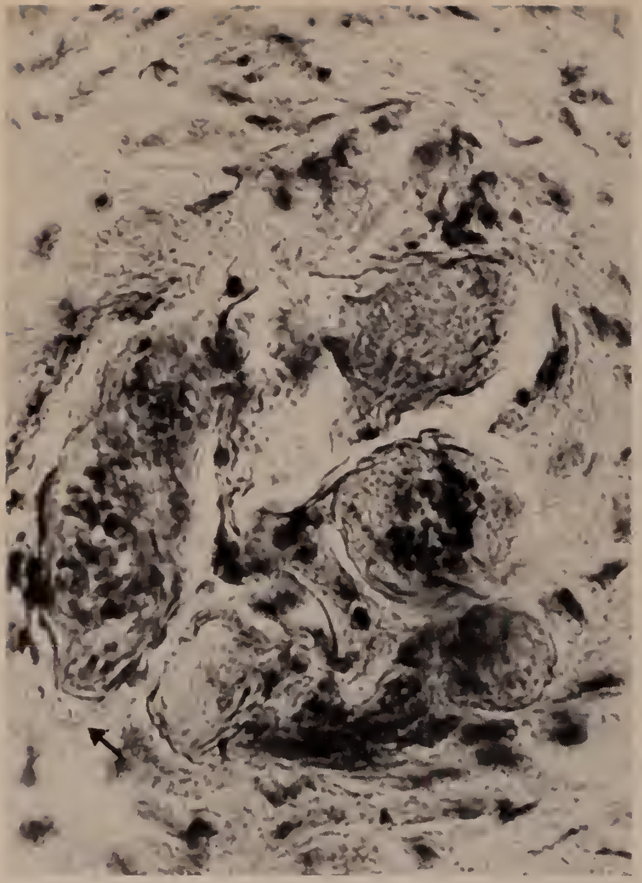

FIGURE 1. Bladder biopsy specimen showing *S haematobium* eggs with terminal spines (arrow).

proval from our Institutional Review Committee were obtained.

RESULTS

Examination of stools for ova and parasites revealed *Ascaris lumbricoides*, *Trichuris trichiura*, and *Endolimax nana* in patient 1. *A lumbricoides* and *E nana* were found in patient 2. The indirect fluorescent antibody test was positive for schistosomiasis in both patients. Bladder biopsy performed on patient 3 revealed *S haematobium* eggs with terminal spines (Fig 1) in the lamina propria and superficial muscularis, and a chronic granulomatous tissue reaction with an intense eosinophilic infiltration.

Cholinesterase levels. In patients 1 and 2 a drop in plasma cholinesterase noted at eight hours after treatment contrasted with the slower drop of erythrocyte cholinesterase noted over a period of two weeks. Plasma cholinesterase returned to 90% of the pretreatment level sooner (two weeks) than erythrocyte cholinesterase (four weeks) (Fig 2).

Quantitative egg counts. Viable eggs were detected in all three patients, as determined by miracidial movement and hatching. Figures 3 and 4 show daily quantitative total and per-milliliter egg counts for patients 1 and 2, beginning 21 days before treatment and continuing for 27 days after treatment for patient 1, and 20 days after treatment for patient 2. By seven days after treatment, egg counts had dropped precipitously, and the aliquot method of egg counting was used until eggs were not longer detectable by this method. By that time, the urine had also begun to clear. Daily egg counts were continued after sedimentation of 24-hr urine specimens until day 81. The eggs were checked for viability, both by microscopic examination for flame cell activity and by hatching tests. Some dead eggs were first noted 21 days after treatment although many eggs were still alive. By 24 days, only dead eggs could be found from patient 2, but living eggs were still found from patient 1 after 26 days. By 28 days after the initial treatment all of the eggs from both patients were dead. From then until day 81, when observations were discontinued, small and variable numbers of dead eggs could be found from both patients. Upon examination six months following treatment both patients 1 and 2 were negative for eggs, and no recurrence was noted through month 12. In the single pretreatment 24-hr egg count done on patient 3, 33,000 eggs were found. He has remained asymptomatic since treatment, and repeated urine examinations through one year have been negative for schistosome eggs.

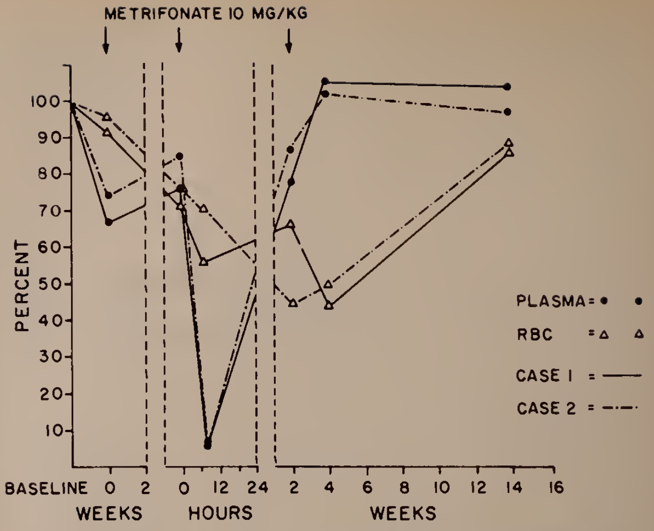

FIGURE 2. Plasma and erythrocyte cholinesterase levels in patients 1 and 2.

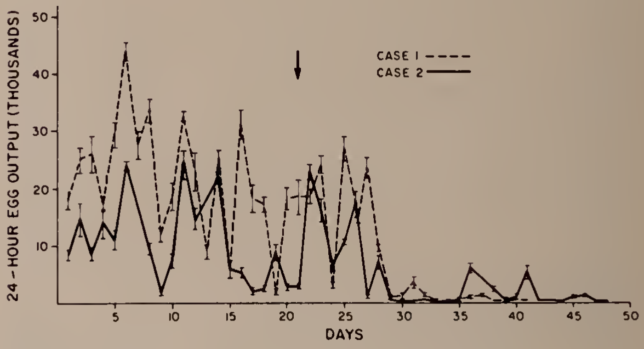

FIGURE 3. Daily total egg output in urine of patients 1 and 2.

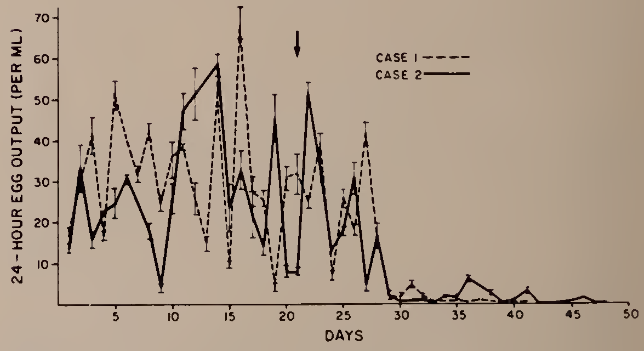

FIGURE 4. Daily egg output per milliliter of urine in patients 1 and 2.

DISCUSSION

Antimonial derivatives have traditionally been used for the treatment of schistosomiasis. These include tarter emetic, stibophen (Fuadin), anthiomaline, triostam, and astiban. These drugs must be administered by either intramuscular or intravenous injection and may produce toxic side effects, including pain, anorexia, nausea, vomiting, rash, pruritis, fever, vertigo, electrocardiographic changes, and severe liver damage.[5] In 1948 the first nonantimonial drug, lucanthone (Miracil D), was introduced.[6] It had the advantage of being administered orally but also produced similar side effects to antimonials, including electrocardiographic changes.[7,8] An intramuscular preparation, hycanthone mesylate (Etrenol) was introduced in 1965 and proved to be even more effective than lucanthone.[5] However, the cure rate differed for *S haematobium* and *S mansoni* species.[9] There still existed a need for an inexpensive drug that would give not only better cure rates than earlier drugs but also have the ease of oral administration.

Another oral drug, niridazole (Ambilhar) was introduced in 1966. It is effective against both *S mansoni* and *S haematobium* but it also causes electrocardiographic changes as well as other side effects in a high percentage of treated patients[10,11] and is ineffective against *S japonicum.* This drug is still widely used. Other oral schistosomicides that have been tried are amphotalide, amphotalide in combination with anthiomaline,[12,13] L 13/59 (Dipterex),[14] and dihydroemetine.[15] At the present time, three orally-administered schistosomicides, praziquantel (Biltricid), oxamniquine (Vansil), and metrifonate (Bilarcil) lead the field.

The safety and reliability of these drugs have been borne out by field test studies.[4,16,17] However, the efficacy of each drug differs according to the species for which it is given. Therapeutic doses of praziquantel halt egg production and cause a shift of worms to the liver where they are subsequently destroyed by the host.[18] Although the precise mode of action of oxamniquine is unknown, it may modify the normal activity pattern of the worms, resulting in the hepatic shift.[19] Oxamniquine is not very effective against *S haematobium.*[20] A cure rate of 95% for metrifonate has been reported in *S haematobium*-infected children attending urban schools where the reinfection rate was very low; the cure rate was 55% for children in rural schools where snail control was intensive; where there was no snail control the cure rate was only 39%.[5] In another study using volunteer school boys and employees of a dairy farm near Khartoum North, the cure rate was 91% and 90% one to five months after treatment, respectively.[4] The reason for the selective action of metrifonate against *S haematobium* is not yet clearly understood. It has been hypothesized that *S mansoni* adults are shifted to the liver, after which they return to the intestine, whereas *S haematobium* are shifted to the lungs, from where they are unable to return to the vesical plexus.[2] The observed host tolerance to a single dose of 7.5 mg/kg metrifonate repeated every two weeks for a total of three doses has been good.[21] The only significant toxic effect of metrifonate in humans is depression of blood cholinesterase. The drug inhibits the activity of acetylcholinesterase and alicholinesterases to a greater extent in *S haematobium* than in *S mansoni* infections.[22] The drop in plasma cholinesterase is immediate, while there is a gradual drop in erythrocyte cholinesterase.[21] The significance of this difference is still unclear. The clinical relevance of this may be in the use of the muscle relaxant suxamethonium. Because of the possibility of delay in the reversal of the effects of suxamethonium, its use within 24 to 48 hours after administration of metrifonate is not recommended.[23] Also, routine blood cholinesterase estimations are not indicated provided the intervals between therapeutic courses are at least two weeks.[2]

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Cardiac diagnoses in preschool and school-aged children in a borough of New York City

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ABSTRACT The register of the Manhattan Cardiac Program was reviewed in 1981 in order to tabulate the number of children with known or possible heart disease and the distribution of their diagnoses. The analysis indicated a total of 455 children: (1) congenital heart disease (preoperative and postoperative) comprised 66%; (2) history of rheumatic fever or rheumatic heart disease 20%; (3) other heart disease 8%; and (4) possible heart disease 6%. These data were compared to those similarly recorded for the borough of Manhattan in 1970. Factors accounting for the decline in the recent number of preschool and school-aged children on the register and changes in the relative proportions of the diagnoses are discussed.

(NY State J Med 1983; 83:1158–1160)

(*See also Commentary p 1148.*)

INTRODUCTION

The purpose of this communication is to present a profile of the cardiac diagnoses in the current population of preschool and school-aged children in the Borough of Manhattan, City of New York. The data, obtained from the register of the Manhattan Cardiac Program in 1981, will be compared with similar material compiled in 1970.

The concept of a cardiac registry for school-aged and preschool children in urban areas has evolved over many decades. One of the first such programs was established 30 years ago in New York City.

In 1947 rheumatic fever, with its attendant heart disease, was recognized as an important public health problem. Congenital heart disease was beginning to be identified and funds were made available through the Medical Rehabilitation Program (Crippled Children's Service) to pay for needed surgery. In New York City, many clinical services and fiscal resources were available for children with cardiac problems. Integration of these services by a single community agency was considered to be an important component of providing optimal care and follow-up.

A rheumatic fever project was developed under the sponsorship of the Department of Preventive Medicine of the New York University School of Medicine, the New York City Board of Education, and the New York City Department of Health, with financial support from the New York Heart Association and the United States Public Health Service. From this pilot study, located in the Lower East Side section of Manhattan, there was developed an administrative structure for a local, or district, register. This was extended to the rest of the borough of Manhattan and, later, to the remaining four boroughs of New York City (Bronx, Queens, Brooklyn, Staten Island).

The Manhattan Cardiac Program is now part of a citywide program administered by the Bureau for Handicapped Children of the New York City Department of Health. The office, located in the East Harlem District Health Center, is responsible for all of Manhattan and is under the supervision of a borough cardiologist (F. B-R). The purpose of the program is to identify all children with a history of rheumatic fever or a cardiac problem, verify the diagnoses, and insure that the children obtain necessary medical follow-up. An important part of the program has been the "delabeling" or eliminating from follow-up of those children in whom a diagnosis of heart disease is excluded. The other critical aspect has been to insure proper class placement in school, depending on activity levels. In the early years, many children were found to be unnecessarily restricted or on home instruction programs. In order to coordinate information, the borough cardiologist functioned as an intermediary with treatment agencies, the Department of Health's School Health Service, and the Board of Education.

There is a standard form used throughout New York City in the public and parochial schools for the description of cardiac history and diagnosis, and recommendations for class placement and activities as well as medical follow-up. A copy of the report, which is required to be updated annually, is initiated by the School Health Service and sent to the Manhattan Cardiac Program office by the clinic or private physician rendering care.

PATIENTS AND METHODS

Information was obtained from the Manhattan Cardiac Program register in the summer of 1981 by the authors and the data were tabulated by the Bureau of Health Statistics of the New York City Department of Health. The information on the preschool and school population identified from the Manhattan Cardiac Program Register in 1970 was previously collected by one of us (F. B-R).

Data were reported according to the seven health districts in Manhattan, and analysis by place of residence indicated that 13% of the children lived in Central Harlem, 16% in East Harlem, 3% in Kips Bay, 24% in the Lower East Side, 11% in the Lower West Side, 9% in Riverside, 23% in Washington Heights, and 1% in other boroughs or unknown.

Age group analysis was carried out according to school grade: preschool (up to 5 years), 53 children; elementary school (6 to 11 years), 165 children; junior high school (12 to 14 years), 99 children; and high school (15 years and older), 138 children.

The children were grouped in four diagnostic categories: group I—congenital heart disease (preoperative and postoperative); group II—history of rheumatic fever, and rheumatic heart

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disease; group III—other heart disease; and group IV—possible heart disease.

RESULTS

There was a marked drop in the number of children on the Cardiac Register in the past 11 years: 1,620 in 1970 and 455 in 1981 (Table I). The changing proportions in the various diagnostic categories is quite evident. In 1981, of the total 455 children with cardiac diagnoses, approximately two-thirds, or 66%, had congenital heart disease, 20% had a history of rheumatic fever or rheumatic heart disease, 8% had other heart disease, and 6% had possible heart disease. In 1970, of the total of 1,620 children, there was a nearly equal number with congenital and rheumatic etiologies: 47% had congenital heart disease and 41% had a history of rheumatic fever or rheumatic heart disease. Other heart disease accounted for 2% of the total, and possible heart disease was noted in 19%.

Congenital Heart Disease (group I)

In 1981, congenital heart disease comprised 66% of the total register (Table I). The eight most common congenital cardiac malformations (including preoperative and postoperative) are listed in Table II in order of decreasing frequency: ventricular septal defect (97), pulmonic stenosis (56), secundum atrial septal defect (46), tetralogy of Fallot (22), patent ductus arteriosus (17), aortic stenosis (15), coarctation of the aorta 911), and atrioventricular (AV) canal (10). This distribution closely parallels the experience in most pediatric cardiac clinics.[1]

Of these 296 children with congenital heart disease, 119 had undergone surgical repair whereas 177 were being followed without an operation having been performed (Table II). In the categories of ventricular septal defect and pulmonic stenosis, the majority of children have not required surgical repair.

History of Rheumatic Fever and Rheumatic Heart Disease (group II)

In 1970, 41% of the total cardiac enrollment had rheumatic fever, with or without heart disease: a history of rheumatic fever was present in 424 children with an additional 236 having rheumatic heart disease. In the present study, the rheumatic group comprised only 20% of the register; 89 children who were nearly equally divided between those with and without heart disease (Table I). Of these 89 children, 45 had a history of rheumatic fever and 44 had also diagnosis of rheumatic heart disease. Of the latter, three underwent open heart surgery for mitral valve disease (valve replacement in two and commissurotomy in one).

The distribution according to age indicates, as expected, that the number of children with rheumatic heart disease (RHD) increases with advancing age:

Up to 5 years: none
6 to 11 years: 17 children (7 RHD)
12 to 14 years: 27 children (10 RHD)
15 years and older: 45 children (27 RHD)

As noted in Table III, nearly half, or 40, of the 89 with rheumatic fever or heart disease were equally divided between two of the seven geographic areas of Manhattan: 20 lived in the Lower East Side and 20 in Washington Heights. This distribution parallels the 1980 school-aged population which was largest in these two districts. It may also be noted that 47% of the total cardiac register also lived in these two areas. The majority of those with rheumatic fever or heart disease were of Hispanic origin: 14 of 20 in each of the two districts.

The prevalence rates of rheumatic fever and rheumatic heart disease calculated for each of the seven districts is noted in Table III. For Manhattan, the prevalence rate is 46.9% cases per 100,000 population aged 6 to 18 years. By district, the rates ranged from 75.1% (Lower West Side) to 30.4% (Kips Bay).

As prophylaxis against recurrence of rheumatic fever, threefourths, or 66, of the children with rheumatic history received monthly intramuscular injections of 1.2 million units of penicillin G benzathine (Bicillin). The remaining 25% received either penicillin or sulfisoxazole (Gantrisin), daily by mouth.

TABLE I. Distribution of Children, All Ages According to Diagnosis in 1970 and 1981

		1970		1981	
Group	Diagnosis	No.	%	No.	%
I	Congenital heart disease, preoperative and postoperative	756	47	303	66
II	Rheumatic fever	660	41	89	20
	History	(424)	(26)	(45)	(10)
	Heart disease	(236)	(15)	(44)	(10)
III	Other heart disease	43	2	34	8
IV	Possible heart disease	161	10	29	6
Totals		1,620	100	455	100

Other Heart Disease (group III)

The diagnoses in this group of 34 children included cardiomyopathy (12), arrhythmias (10), and mitral valve prolapse (6).

Possible Heart Disease (group IV)

This group of 29 children mainly comprised those with systolic murmurs in whom the differential diagnosis of organic heart disease versus innocent murmur was not certain. Also included in this category were a few children with unusual radiographic or electrocardiographic findings.

Pacemakers and Medical Care

Cardiac pacemakers were implanted in seven children, four of whom had congenital heart block and are included in the "other heart disease" category. The remaining three children had undergone open heart surgery for cardiac malformations (AV canal, tetralogy of Fallot, and transposition of the great vessels). A total of 395 children, or 87% of the register, were enrolled in cardiac outpatient clinics of hospitals in the borough of Manhattan. The remaining 13% were under the care of private physicians.

DISCUSSION

Many factors should be considered responsible for the decline in the number of children in the Manhattan Cardiac Register from 1,620 in 1970 to 455 in 1981. One of the more important reasons, we believe, is the decrease in incidence of rheumatic fever in children born and brought up in the United States. It may be noted that several of the new cases of rheumatic fever or heart disease identified in 1980 to 1981 were children who immigrated here from the Caribbean islands and South America.

In addition, according to the last census, there has been an overall decrease in the number of children under the age

TABLE II. Congenital Cardiac Malformations, Preoperative and Postoperative, in Order of Frequency (1981)

Defect	Preop	Postop	Total
Ventricular septal defect	77	20	97
Pulmonic stenosis	47	9	56
Atrial septal defect	16	30	46
Tetralogy of Fallot	1	21	22
Patent ductus arteriosus	3	14	17
Aortic stenosis	12	3	15
Coarctation of aorta	1	10	11
AV canal	3	7	10
Other	17	5	22
Totals	177	119	296

TABLE III. Rheumatic Fever and Rheumatic Heart Disease by District of Residence and Ethnic Group, 1981

District (Population Aged 6–18)*	Diagnosis	Black	Hispanic	Oriental	White	Unknown	Total	Prevelance Rate Cases per 100,000 Population Aged 6–18
Central Harlem	RF	0	2	0	0	0		
(22,829)	RHD	4	0	0	0	1	7	30.7
East Harlem	RF	0	0	0	2	2		
(27,858)	RHD	3	5	0	0	0	12	43.1
Kips Bay	RF	0	0	1	2	0		
(16,428)	RHD	0	0	1	1	0	5	30.4
Lower East Side	RF	0	8	0	3	0		
(32,762)	RHD	0	6	1	2	0	20	61.0
Lower West Side	RF	0	5	3	0	1		
(21,307)	RHD	0	3	1	2	1	16	75.1
Riverside	RF	0	4	0	1	0		
(25,880)	RHD	0	4	0	0	0	9	34.8
Washington Heights	RF	0	10	0	1	0		
(42,526)	RHD	1	4	0	2	2	20	47.0
Totals 189,590	RF (45)	0	29	4	9	3		
	RHD (44)	8	22	3	7	4	89	46.9
		8	51	7	16	7		

* US Bureau of the Census, unpublished data, 1980.

of 18 years in New York City since 1970 and a 23% decrease in the school-aged population in Manhattan (US Bureau of the Census, unpublished data, 1980).

There has also been a curtailment of the School Health Service during the past six years. In the past, this service was the major case-finding source for children with rheumatic fever or heart disease in New York City. There has been a general decrease in the number of school health forms (eg, orthopedic and ophthalmologic forms) issued in 1971–1972, 347,527 with a return of over 50%, compared with 191,499 with a return of only 45% in 1980–1981 (per reports to the Bureau of Health Statistics).

As noted in our Results section, the vast majority of children were under medical care at hospital-based cardiac clinics, and the distribution of patients by diagnosis on the 1981 register fairly accurately reflects that of the enrollment in these clinics.[1]

Although rheumatic fever registries may have outlived their usefulness,[2] in many communities there still appears to be a need for having a central registry of all school-aged children with cardiac diagnoses, for verification of diagnosis and for coordination of services as these apply to class placement and medical follow-up.

Acknowledgment. The authors thank Jean L. Seifer for her statistical assistance.

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Syncope in a general hospital patient population

Usefulness of the radionuclide brain scan, electroencephalogram, and 24-hour Holter monitor

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ABSTRACT **The usefulness of the radionuclide brain scan, electroencephalogram, and 24-hour Holter cardiac monitor was evaluated in the assessment of 205 patients admitted to Montefiore Hospital for syncope. Brain scanning revealed no diagnostic abnormalities that resulted in medical intervention in patients without neurologic signs or symptoms, but it produced diagnostic information in 8% of patients with neurologic signs or symptoms ($P < .05$). The electroencephalogram did not provide evidence of a new seizure disorder in any patient. Holter monitoring uncovered arrhythmias predisposing to syncope in 21% of all patients. The diagnostic yield of the Holter monitor was the same in patients with and without neurologic findings. These results suggest that electroencephalography should not be performed routinely in patients admitted to hospital with syncope. Radionuclide brain scanning is of some diagnostic aid in patients with neurologic findings but of little use in patients without such findings. Holter cardiac monitoring appears to be a useful test for patients admitted with syncope.**

(NY State J Med 1983; 83:1161-1165)

INTRODUCTION

Syncope is a clinical disorder comprising a sudden transient loss of consciousness which is usually secondary to generalized cerebral anoxia.[1,2] This is a common problem on general medical services, and at Montefiore it accounts for approximately 6% of all patients admitted to the medical floors. Historical information, physical examination, routine laboratory data, and an electrocardiogram obtained on admission frequently fail to disclose a cause of the patient's syncope. Patients then frequently undergo three diagnostic tests: a radionuclide brain scan, an electroencephalogram (EEG), and a 24-hour Holter cardiac monitor. While numerous reports have documented the importance of 24-hour Holter cardiac monitoring in the evaluation of patients with syncope,[3-6] the routine use of brain scanning and EEG for this purpose has not yet been studied. In this study, we evaluated the usefulness of the radioisotopic brain scan, EEG, and Holter monitor in the assessment of hospitalized patients with syncope.

PATIENTS AND METHODS

A list of all patients who underwent radionuclide brain scanning at Montefiore Hospital between January 1980 and January 1981 was reviewed. Ninety-eight patients who had an admission or discharge diagnosis of syncope were selected (group 1). The charts of 107 additional patients were selected from a pool of patients admitted or discharged with a diagnosis of syncope between January 1981 and April 1982 (group 2). The admission and discharge diagnoses used to obtain the charts were those entered into the hospital record by the attending physician. Each medical record was extensively reviewed by one of the authors (H.G., M.L., or M.G.), to abstract demographic and clinical data as well as laboratory and diagnostic results for each patient.

Twenty charts were reviewed in a similar manner in a substudy by two physicians who were unaware of the study's hypotheses. Concordance was 100% in 19 of 20 patients for all information sampled.

All patients had been admitted to the medical, neurologic, cardiac, or neurosurgical wards at Montefiore Hospital. All Holter cardiac monitors were performed for 24 hours. All EEGs were performed with electrodes placed according to the International 10-20 System. Sleep recordings, photic stimulation, and hyperventilation were performed when indicated. All brain scans consisted of dynamic and static imaging.

The usefulness of the brain scan, EEG and Holter monitor in the establishment of a final diagnosis for syncope was dependent on significant test abnormalities as determined by the attending neurologists, nuclear radiologists and cardiologists who interpreted the tests. Significant abnormalities would frequently but not invariably result in a final diagnosis for syncope. However, the attending physician's assessment of the final diagnosis was used as the major criterion for determining whether a test result was diagnostic.

Any bradyarrhythmia or tachyarrhythmia resulting in lightheadedness, dizziness, or syncope during Holter monitoring was considered significant as a cause of syncope. The following predisposing arrhythmias seen on Holter monitor without accompanying symptoms were also considered significant: (1) bradyarrhythmias with a ventricular rate of fewer than 30 beats/min; (2) second- or third-degree atrioventricular (AV) block; (3) supraventricular tachycardias with a ventricular rate of more than 160 beats/min; and (4) ventricular tachycardia. Asymptomatic unifocal ventricular premature contractions, sinus pauses of less than three seconds, and nonsustained atrial tachycardias were considered nonsignificant Holter results. A Holter monitor test was considered diagnostic if it resulted in a final cardiac diagnosis for syncope.

An EEG was significant if spikes, sharp waves, or temporal discharges were found defining an underlying seizure disorder. Other abnormalities (whether focal or diffusely abnormal wave forms) were considered to be diagnostic if they resulted in a final neurologic diagnosis.

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TABLE I. Past Medical History in 205 Patients With Syncope*

History	No. (%)
Cardiac	
ASCVD	69 (34%)
Hypertension	56 (27%)
Arrhythmias	31 (15%)
Valvular	10 (5%)
Neurologic	
OMS	18 (9%)
CVA	12 (6%)
TIA	7 (3%)
Seizure	6 (3%)
Other	5 (2%)
Endocrine	
Diabetes	21 (10%)
Other	7 (3%)
Malignant condition	18 (9%)
Pulmonary disease	3 (1%)
Renal failure	2 (1%)
Other	24 (12%)
None	40 (20%)

* Patients may have more than one past medical illness.

Abbreviations: ASCVD, Atherosclerotic cardiovascular disease; OMS, Organic mental syndrome; CVA, cerebrovascular accident; TIA, transient ischemic attack.

TABLE II. Discharge Diagnoses in 205 Patients With Syncope

Diagnosis	No. (%)	
Cause unknown	73 (36%)	
Vasovagal episode	17 (8%)	
Cardiac	43 (21%)	
Arrhythmia		40 (19%)
Myocardial infarction		2 (1%)
Valvular heart disease		1 (1%)
Neurologic	21 (10%)	
Transient ischemic attack		13 (6%)
Cerebrovascular accident		4 (2%)
Seizure disorder		2 (1%)
Brain tumor		2 (1%)
Postural hypotension	11 (5%)	
Iatrogenic*	10 (5%)	
Psychiatric†	6 (3%)	
Metabolic**	6 (3%)	
Micturition	5 (2%)	
Pulmonary embolism	2 (1%)	
Anemia	1 (1%)	
Other	10 (5%)	

* Iatrogenic causes include digitalis toxicity, quinidine toxicity, diuretic- or nitrate-induced syncope.

† Psychiatric causes include hyperventilation.

** Metabolic causes include hypoglycemia and hyponatremia.

The abnormalities accepted as significant on radionuclide brain scanning included unilateral or bilateral flow defects interpreted as significant by the attending nuclear radiologist, or localized areas of increased radionuclide uptake representing cerebral mass lesions or areas of cerebral infarction. A diagnostic brain scan was defined as an abnormal test result in which a final neurologic diagnosis for syncope was made.

RESULTS

For the variables considered, few differences were found between group 1 and group 2. Results are presented for the two groups combined and differences will be noted where applicable.

Of the 205 patients admitted for syncope, 86% were over the age of 50, with 56% being 60 years old or older. Only 4% were between ages 18 and 39. Table I shows the medical history of patients admitted with syncope. The most common medical problems present were hypertension, coronary artery disease, and arrhythmia. Twenty-three percent had a history of neurologic disease. Twenty percent had no medical problems other than syncope.

Table II reveals the discharge diagnoses of patients with syncope. Of the 205 patients, the etiology of syncope was unknown in 36%, vasovagal in 8%, cardiac in 21%, and neurologic in 10%. Both groups had similar distributions of diagnoses in all categories with the exception of neurologic diagnoses (16% in group 1, and 5% in group 2).

Table III compares the admission or "working" diagnosis to the final diagnosis. Of patients admitted with a working diagnosis of "unknown," 63% left the hospital with no known cause for syncope but 19% were discharged with a cardiac diagnosis. Of 17 patients with an initial diagnosis of vasovagal syncope, 94% left with a final diagnosis of vasovagal or unknown. Although not all of these patients had all three of the diagnostic tests under evaluation, this result suggests that the yield of in-hospital assessment is very low in patients admitted with a working diagnosis of a simple faint (vasovagal episode). In addition, several occult cardiac diagnoses (19%) were discovered in patients who when admitted had an unknown diagnosis for their syncope.

Group 1 patients had all brain scans (by definition), 59% had Holter cardiac monitors, 31% had CT scans, and 81% had EEGs. Of group 2 patients, 61% had brain scans, 60% had Holter cardiac monitors, 17% had CT scans, and 60% had EEGs.

Brain Scan

A total of 169 patients had brain scans and 107 (66%) were normal. Nine percent of all scans had significant findings (10% of group 1 and 4% of group 2 patients). Most patients with abnormal brain scans had minimal defects consistent with less than 50% occlusive disease or an abnormality suggesting a mass lesion.

Table IV correlates brain scan results with final diagnosis. A significant scan as defined above represented significant cerebrovascular disease but did not always result in a neurologic diagnosis for syncope. Significant brain scans were found in all the various final diagnostic categories. Half of the patients with a final neurologic diagnosis for syncope had normal brain scans while a third had significant abnormalities. Using a significant abnormality as a positive test result, the brain scan had a sensitivity of 30% (ie, correctly identified 30% of

TABLE III. Correlation of Working Diagnosis With Final Diagnosis

Working Diagnosis	Unknown	Vasovagal	Cardiac	Neurologic	Other	
Unknown	34 (63%)	0 (0%)	10 (19%)	3 (6%)	7 (13%)	54 (26%)
Vasovagal	2 (12%)	14 (82%)	0 (0%)	0 (0%)	1 (6%)	17 (8%)
Cardiac	18 (33%)	3 (5%)	26 (47%)	2 (4%)	6 (11%)	55 (27%)
Neurologic	9 (27%)	0 (0%)	5 (15%)	15 (45%)	4 (12%)	33 (16%)
Other	9 (20%)	0 (0%)	2 (4%)	1 (2%)	34 (74%)	46 (22%)
Totals	72 (36%)	17 (8%)	43 (21%)	21 (10%)	52 (25%)	205

neurologic final diagnoses), a specificity of 94% (ie, correctly identified 94% of nonneurologic final diagnoses), and a predictive value of 43% (ie, 43% of significant abnormalities had neurologic final diagnoses).

Three of the nine patients with a normal brain scan and a final neurologic diagnosis had abnormal CT scans. Two of these patients had solitary brain tumors while a third patient had a small lesion at the vertex consistent with an old cerebral infarction. In two other patients, brain scans suggested mass lesions but the nature of the lesions was not defined. Computerized tomography scanning in these patients showed a subdural hematoma in one patient and an intracerebral hemorrhage in the other.

Of those patients with positive neurologic findings (a positive neurologic history, abnormal neurologic signs on physical examination, or the presence of a carotid bruit), 8% had diagnostic brain scans. Of the patients without neurologic findings, 1% (one patient in 94) had a significantly abnormal scan which resulted in a final neurologic diagnosis. The sole patient without neurologic findings but with a significant brain scan was an elderly woman discharged with a diagnosis of transient ischemic attack (TIA) that resulted in no medical therapy.

EEG

A total of 143 EEGs were performed and 89 (62%) were normal. Thirty-five percent had diffuse or focal abnormalities. No patient had sharp waves or spike waves as a sole abnormality. Two patients were discharged with a diagnosis of seizure disorder, both of whom had a prior history of epilepsy. One of these patients had temporal discharges (ie, a diagnostic EEG) on nasopharyngeal leads.

Table V shows the EEG results in patients with various categories of final diagnoses. Diffuse and focal EEG abnormalities were found scattered throughout all final diagnostic categories. There was no specific EEG abnormality that resulted in a neurologic final diagnosis. Taking any abnormality on an EEG as a positive test result, the EEG had a sensitivity of 53%, a specificity of 64%, and a predictive value of 16%.

Holter Monitor

A total of 121 patients had Holter monitor tests. Forty-nine (40%) of these were normal, 39% were minimally abnormal, and the remaining 21% were significantly abnormal. A breakdown of the significantly abnormal results is as follows: 9 patients with ventricular tachycardia, 5 with atrial tachycardia, 2 with supraventricular tachycardia, 4 with sinus bradycardia, 1 with atrial fibrillation with a 3-sec pause, 2 with Mobitz type 2 AV block, and 3 with third-degree AV block. One patient had both ventricular tachycardia and second-degree AV block. A significantly abnormal Holter monitor was virtually always considered by the attending physician to be diagnostic for cardiac syncope. Table VI shows the Holter monitor results as a function of the working and final diagnosis.

Nineteen percent of patients with a nondiagnostic Holter monitor and a number of patients who did not undergo Holter monitoring were still discharged with a final cardiac diagnosis for syncope. One of these patients had valvular heart disease (aortic stenosis), another a myocardial infarction, and others programmed electrical stimulation or carotid sinus massage which induced arrhythmias to explain their syncope. A similar percentage of patients with (21%) or without (22%) neurologic findings had predisposing arrhythmias on Holter monitoring. Thus, the Holter test was of equal benefit to all hospitalized patients regardless of whether they had neurologic findings on admission. Using a significant arrhythmia as a positive test result, the Holter monitor had a sensitivity of 81%, a specificity of 100%, and a predictive value of 100%.

Age

No diagnostic Holter tests were found in the group of 28 patients less than 50 years of age. One significant abnormality was found on brain scan in this age group but did not result in a neurologic discharge diagnosis.

Discussion

Using a discharge diagnosis as a criterion for test usefulness, the EEG and the radionuclide brain scan were found to have little value without proper direction (presence of neurologic findings or suspicion of seizure disorder). The Holter monitor was found routinely useful for all patients.

This study suggests that routine use of the EEG in the evaluation of patients with syncope without witnessed seizure activity should be discontinued and that brain scanning should be reserved for patients with a remarkable neurologic history or neurologic examination. This would result in diminished health care costs.

The findings presented here are subject to whatever selections went into a decision to admit the patients. The patients were picked from two distinct groups weighted strongly towards neurologic cause of syncope. Furthermore, not all patients had all three tests, making it more difficult to compare the usefulness of one test over the others.

Brain Scanning

Attending physicians do not rely on brain scans to make a final diagnosis for syncope. This is evident from the number of significantly abnormal results on brain scans without a neurologic final diagnosis and normal brain scans with a neurologic final diagnosis. Kapoor and colleagues[7] made a similar observation for a small number of patients.

It therefore could be predicted that brain scanning would be of limited value in the assessment of patients with syncope. The use of brain scanning in syncope would seem to be to detect cerebral infarction, diffuse cerebrovascular disease, or central nervous system tumor. In patients sustaining a cerebrovascular accident however, brain scanning within the first week will be abnormal in only 25% of cases.[8] In the detection of brain tumors, the brain scan is said to be 85% sensitive, although the two patients in our study who had brain tumors had normal brain scans.

Of the 97 patients in our study without neurologic signs or symptoms, brain scanning detected only one patient with a neurologic cause for syncope. This was an elderly woman who was discharged with a diagnosis of a TIA for which no therapy was recommended. In 67 patients with abnormal results of neurologic examination, a remarkable neurologic history, or a carotid bruit (ie, with neurologic findings), brain scanning was significantly abnormal and a neurologic final diagnosis was reached in five additional patients.

There were several patients with normal brain scans who were discharged with neurologic diagnoses. Many of these patients had positive brain CT scans. This casts further doubt on the usefulness of brain scanning in the evaluation of patients with syncope. The small number of patients who had both brain and CT scans performed, however, leaves the role of CT scanning in this regard undefined.

Electroencephalography

The main purpose of the EEG is to screen for patients who lost consciousness because of a seizure. The EEG may be clearly abnormal in the interictal period and thus help differentiate seizure from other causes of syncope. However, 40% of patients with a seizure disorder sometimes will have normal EEGs. Diffuse abnormalities (delta, theta, and slow alpha activity) on the EEG may indicate neurologic disease; however, these same abnormalities can be found in a significant number of normal individuals.[9-11] Electroen-

TABLE IV. Correlation of Brain Scan Results With Final Diagnosis

Final Diagnosis	Normal Result	Minimal Abnormality	Significant Abnormality	Tests Done	Total Patients
Unknown	38 (72%)	11 (17%)	4 (11%)	53	72
Vasovagal	10 (77%)	1 (7%)	2 (16%)	13	17
Cardiac	22 (67%)	9 (27%)	2 (5%)	33	43
Neurologic	9 (45%)	5 (25%)	6 (30%)	20	21
Other	28 (67%)	14 (33%)	0 (0%)	42	52
Totals	107	40	14	161	205

sensitivity = 30%, specificity = 94%, predictive value = 43%

TABLE V. Correlation of EEG Findings With Final Diagnosis

Final Diagnosis	Normal Result	Diffuse Abnormality	Focal Abnormality	Other Abnormality	Tests Done	Total Patients
Unknown	28 (57%)	9 (18%)	7 (15%)	5 (10%)	49	72
Vasovagal	10 (84%)	1 (8%)	1 (8%)	0 (0%)	12	17
Cardiac	22 (79%)	5 (18%)	1 (3%)	0 (0%)	28	43
Neurologic	7 (47%)	5 (33%)	3 (20%)	0 (0%)	15	21
Other	22 (56%)	16 (41%)	1 (3%)	0 (0%)	39	52
Totals	89	36	13	5	143	205

sensitivity = 53%, specificity = 64%, predictive value = 16%

cephalography, therefore, is also unlikely to provide, with any frequency, useful data in assessing the patient with syncope. Our results support this. Neither diffuse nor focal abnormalities on EEG were useful in reaching a final neurologic diagnosis in our patients except in one patient with a prior history of epilepsy and temporal discharges on nasopharyngeal leads of the EEG. Only two of 205 patients left the hospital with a final diagnosis of seizure disorder, and both had a history of seizure activity. A recent report by Day et al[12] suggests that electroencephalography may provide valuable information in the evaluation of emergency room patients presenting with transient loss of consciousness. This study included many patients with clearly described seizure activity. Thus, it is difficult to apply Day's data to our patients who were hospitalized for syncope without witnessed seizure activity.

Holter Monitoring

The merits of Holter monitoring in this setting have been propounded by many investigators. Luxon and colleagues[3] noted that 33% of their patients with unexplained syncope had a significant arrhythmia on Holter monitoring. Jonas and coworkers[5] found a frequency of approximately 20% of their patients with recurrent syncope or dizziness had significant arrhythmias on Holter monitoring. In this study 358 patients with symptoms of intermittent dizziness or

TABLE VI. Correlation of Holter Monitor Findings With Working and Final Diagnoses

	Holter Result			
Diagnoses	No Significant Arrhythmia*	Significant Arrhythmia†	Tests Done	Total Patients
Working diagnosis				
Unknown	33 (85%)	6 (15%)	39	54
Vasovagal	12 (100%)	0 (0%)	12	17
Cardiac	21 (62%)	13 (38%)	34	55
Neurologic	12 (71%)	5 (29%)	17	33
Other	17 (89%)	2 (11%)	19	46
Final diagnosis				
Unknown	43 (100%)	0 (0%)	43	72
Vasovagal	11 (100%)	0 (0%)	11	17
Cardiac	6 (19%)	26 (81%)	32	43
Neurologic	10 (100%)	0 (0%)	10	21
Other	25 (100%)	0 (0%)	25	52

sensitivity = 81%, specificity = 100%, predictive value = 100%

* No significant arrhythmia defined as normal Holter monitor and minimally abnormal Holter monitor.

† Significant arrhythmia as defined in text.

syncope were investigated by 24-hour outpatient Holter cardiac monitoring. These arrhythmias included sustained ventricular or atrial tachycardias, bradyarrhythmias (less than 40 beats/min), asystole (greater than 4 sec), paroxysmal supraventricular or ventricular tachycardias, sinoatrial block, and high-degree AV block. These criteria closely matched our own. Of our patients who underwent 24-hour Holter cardiac monitoring, 21% had a significant arrhythmia.

Acknowledgments. The authors wish to thank Stuart Feinstein, MD and Paul Marantz, MD for their assistance with the concordant substudy, Elaine Langlois and Joyce Sloman for secretarial help, and Thomas Moench, MD for thoughtful suggestions and review of the manuscript.

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Recent experiments in medical education

ALFRED GELLHORN, MD

(*See also Commentary pp 1170.*)

If you have been following the news, you may have heard the following allegations: Liberal arts education is being destroyed for premedical students; the premedical syndrome is as common as homesickness among college students; admissions committees believe that the art and science of medicine stems from organic chemistry; there are too many physicians; physicians are cold, arrogant, avaricious technologists; their ethics are bad; expenditures for health care in the United States are second only to the cost of national defense; premature births and perinatal mortality are higher in neighborhoods around medical schools than around any other urban institution.

If you have heard all this, then you know that this is only a partial indictment of medical schools.

Contrary to the conventional wisdom, however, most medical schools spend a great deal of time and effort analyzing their strengths and weaknesses and thinking about the purposes of their educational program. Further, it is little appreciated by those who are impatient with the slow pace of change in medical schools that the variety of potency of vested interests and power bases in and about these institutions would dazzle a Byzantine court. But changes do occur; let me review a few that I have witnessed.

It is always easier to innovate when starting afresh, so it is not surprising that many modifications of the traditional Flexnerian model were introduced in the 22 new medical schools that were established between 1960 and 1982.[1,2] Also, this was a time of social ferment manifested by the civil rights movement, opposition to the war, and the student revolt. Affirmative action and medical care for the poor were major concerns. The focus of clinical education in most of the new schools was on community hospitals rather than on academic medical centers, and this provided challenges and rewards for faculty, community physicians, and students. Certainly for these schools, the major emphasis was not on tertiary care, and students probably gained a better insight into the common but not trivial medical problems of people in their community. The impact of these new medical institutions on the distribution of physicians is now being felt, and the increased attention to the social sciences that was emphasized in the new medical schools has been adopted, at least in part, by most traditional institutions.

I would like to focus on a smaller experiment, which was designed to examine the interface between university undergraduate education and medical school. It was initiated in 1975 by Carleton Chapman, MD, then president of the Commonwealth Fund. He wrote in the fund's first annual report that the purpose was

> to stimulate and accelerate the breaking down of barriers that have grown up between the basic sciences in the medical schools and the natural and behavioral sciences elsewhere in the present institution. . . . Actually, the interface, or rather barrier, has grown out of a rigid isolation of the so-called basic biomedical sciences from the rest of the university. Basic biomedical science departments in medical schools exert a profound influence on educational activities at the college level, and, by controlling according to their own standards the entry into clinical medicine itself, are in a position to determine the educational product to a very important degree.

Two concepts were important in formulating the Commonwealth Fund program. First, universities and their medical schools were encouraged to develop joint educational and research programs which would recognize that many areas of the natural and social sciences do not fit neatly into present departmental structures, for example, neurobiology, genetics, bioethics, and cultural currents and medicine. Such development, it was hoped, would provide a university-wide perspective of education, would open educational opportunities to all qualified students, and, at a minimum, would require university faculties to join in frank and serious discussions of these issues. Second, there was a requirement in the Commonwealth Fund grant for early admission of some proportion of the medical school class. This requirement was included to increase the experience with early admission and to assess its significance on the premedical syndrome. It was also hoped that the Commonwealth Fund grant in selected institutions would lead to reexamination of the traditional premedical subjects and that more attention could be focussed on the scientific method, quantitative thinking, and problem solving and less on memorizing facts.

In November 1975, the Commonwealth Fund made its first Interface Program grant to the University of Rochester. During the next four years, six more universities received substantial grants for widely different proposals that addressed aspects of the central interface issues.

During 1979 and 1980, I had the opportunity to evaluate the seven university programs, and I have remained close to the City College of New York School for Biomedical Education.[3] At this date, four of the programs have become an accepted part of these institutions, and the City College

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Presented at the Annual Meeting of the Council of Deans, Association of American Medical Colleges, Scottsville, Arizona, April 1983.

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effort continues to flourish. A brief review of these successful experiments may illuminate some possible applications for other experimental programs.

BOSTON UNIVERSITY

In the Boston University program, students are selected in the sophomore year of college for entrance into the Modular Medical Integrated Curriculum (MMEDIC) and are given a place in the first-year medical school class two years hence. During the last two years of college the students may take a number of modules of instruction in the life sciences, which include both regular medical school basic sciences and restructured premedical natural sciences, and modules in the social sciences such as medicine and the law, lifespan developmental psychology in health and illness, experimental design and biometrics, as well as modules in the humanities such as medical ethics, philosophy of medicine, and Spanish for health care professionals. All these courses are open to medical students and to undergraduates at Boston University, whether or not they are headed for careers in the health field. On graduation from MMEDIC, the student may have completed one quarter to one third of the required courses of the first year of medical school, thereby reducing the pressures of that period and freeing time for continuing experience in other areas of interest.

Fifteen students have been accepted into each of the first six MMEDIC classes, for a total of 90 students.

The Boston University program, which the faculties of medicine and arts and sciences agree has been successful, demonstrates that students can be accepted early, that their subsequent academic performance is not impaired despite opting for more difficult courses, and that all undergraduates at Boston University profit because of the wide selection of courses in human biology open to all. Another benefit has been the associations between medical faculty and colleagues on the Charles River campus. The joint development of courses that bear credit in both the undergraduate curriculum and the medical school and that can be taught by either faculty is a major step in reuniting the medical school to the university.

BROWN UNIVERSITY

Like Boston University, Brown has had long experience with early admission to medical school, even as early as first-year college students. Brown had also developed medical school basic science courses in the Division of Biological and Medical Sciences of the university. With the Commonwealth Fund grant, Brown therefore devoted its efforts to restructuring the premedical sciences and developing an exciting array of interdisciplinary courses in the social sciences and humanities which would better prepare a potential physician and enrich the outlook of any student, regardless of career aspirations.

The chemistry sequence has been restructured to build more effectively from inorganic chemistry to biochemistry. An applied mathematics/physics sequence was created to stress the interrelationship of the disciplines and to emphasize quantitative problem-solving. But despite the intellectual stimulus and challenge, the enrollment fell and the course was dropped this year. Was it too demanding, too much work with other course requirements, not compatible with the thought processes of medical people? Brown University has not completed the postmortem, but the faculty will try to understand what went wrong.

A neural science course and laboratory were developed which reflected the cutting edge of science in the years 1975 to 1978. Now, it might be molecular genetics.

An assortment of interesting interdisciplinary courses is in place. Included are Introduction to Human Behavior (entirely taught by clinical faculty but conducted on the undergraduate campus), Medicine and Law (a rigorous, mind-expanding experience in which precision of language is wonderfully appreciated), Health and Society (both a course and a concentration which encompasses anthropology, sociology, and philosophy), and others. Depending on the curriculum selected, students may earn the BS/MD in seven years or the BA/MD in eight.

The Brown University experiments have abundantly demonstrated the mutual enrichment of the medical school and its parent university by the interaction of faculties, and to the profit of all students. Is it possible that the increase in admission applications this year at Brown—unique among Ivy League colleges—reflect the sense of unusual and exciting educational opportunities that await the accepted student?

UNIVERSITY OF ROCHESTER

At the University of Rochester, the interface concept took on a life of its own, transforming the university's education and research. The program started off modestly with a 2-4-2 concept, ie, the first two years of college; then a four-year sequence for a small group of early-admissions students who complete an enriched baccalaureate program and the course work of the first two years of medical school; and, finally, the traditional last two clinical years. The explosion of new ideas for courses and research came from the necessity of joint planning by the university and medical school faculties. Innovative natural science offerings that linked the physical and biological sciences were developed, and these were open to all. Some basic medical science courses were also opened to undergraduates who had no interest in medicine, and a variety of stimulating interdisciplinary courses in the social sciences and humanities were planned. The intermixing of diverse faculty soon reached a critical mass and chain reactions occurred. No longer could the traditional departmental boundaries contain the variety of ideas for interdepartmental research and teaching. This led from large programs of an interdisciplinary nature to smaller faculty groupings formally designated as "clusters," which jointly plan, submit their proposals to an academic body, and are approved to function as long as they are productive. Like stars, they may shine brightly for a time and then die, because ideas may stagnate or other relationships form.

At Rochester, the Commonwealth Fund grant catalyzed a powerful ferment which has enriched both the education of all students and the faculty though new associations and an impressive flow of research support.

CITY COLLEGE OF NEW YORK

The Sophie Davis School for Biomedical Education at City College is now in its tenth year.[4] High school seniors are accepted into a six- or seven-year BS/MD program. During the four or five years at City College, the students meet the requirements for the bachelor's degree and complete the course work of the first two years of medical school. On graduation from City College, they transfer to guaranteed positions in the third year of one of eight medical schools. Integrating the physical and natural sciences with the basic medical sciences provides a continuity of intellectual content and course time is reduced. This allows expanded opportunities for electives and required courses in the humanities.

Both in its student selection and in its curriculum, the City College program has emphasized the information and training needed for primary care physicians in needy areas of large cities. Field experience takes place in medically underserved urban neighborhoods, and the social science components have been specifically developed to increase students' understanding of urban life. A total of 302 students have graduated and, as of one year ago, 104 have completed medical school and are now in residency training, 70% in primary care specialties, 10% in obstetrics and gynecology, and 5% in psychiatry. Attrition in the City College program now runs at 10% to 13%, of which 3% to 5% is for nonacademic reasons. To the best of my knowledge, no student has failed to complete the course work of the third and fourth year of medical school. The class composition includes 12.5% blacks and 9.2% Hispanics compared with the national figures of 6.9% and 5.3%, respectively, which include the predominantly black medical schools. These current statistics have been provided by L. Meiselas, MD, and S. Eder.

EFFECTS OF PROGRAMS

The foregoing is a small sampling of innovative university-medical school programs which have overcome the artificial separation of the basic medical school sciences and the rest of the university. The Commonwealth Fund can count this as a greater achievement than some of the other important effects of the experiments. The early admission process, which eliminated many of the symptoms of the premedical syndrome, demonstrated that the fortunate students did not thereafter fritter away their time. Quite the contrary, they devoted intelligent enthusiasm to broadening their horizons. The only surprise to me has been the slow acceptance of the evidence.

The innovations in the physical and biological sciences more closely linked the two areas, emphasizing the unity of science. Most valuable has been the new educational opportunities for nonmedical students in health-related sciences. This has led, for example, to the creation of university departments of biochemistry and microbiology at Dartmouth and Rochester, respectively. Interesting and lively curricular offerings by the social sciences and humanities faculty, often with enthusiastic and effective collaboration of clinical faculty, have introduced exciting opportunities for many students, premed and otherwise. In this regard, many students elected study in philosophy with emphasis on moral theory. Most medical schools now offer courses in bioethics. A careful evaluation of one such course led the course directors to conclude, sadly, that there were no significance difference before and after testing in students' critical or analytical ability or in their self-reported interest in social and moral problems.[5] The authors' explanation was that, lacking an adequate foundation in moral theory, the students were able to express and maintain personal opinions because they had no theory with which to compare their views. This would appear to be a good reason to encourage moral theory in the premedical curriculum.

THE FUTURE

I think the premedical syndrome is likely to diminish dramatically in the next few years. This will be due, I believe, to two principal factors. The first is that students may begin to believe that medical school admissions committees are interested in majors other than chemistry and biology.[6,7] This could be reinforced if the new Medical College Admissions Tests were given less importance, since they cover only science subjects. Second, and most important, the applicant pool is shrinking, and will continue to do so, because of demographic laws as well as evolving societal events. In fact, so certain is this that the old ploy against students may be turned on the medical schools: Look to your neighbor medical school on the right and on the left. In five years only two of you will still be here.

Not only will there be a smaller number of 21-year-olds in the coming years but at the present rate of output there will be a 30% increase of physicians per capita population. The Graduate Medical Education National Advisory Committee estimate of 140,000 excess physicians by the year 2000 has been attacked, but there is considerable supporting evidence. Since 1976, Congress and succesive administrations have been reducing support for medical education, and I wonder which medical school will have the courage to propose a capitation-reduction incentive. In any event, I believe that universities should inform undergraduate students considering medicine what the future of medicine is likely to be.[8] There will be more salaried physicians employed by health maintenance organizations, unions, for-profit hospital chains, and government. The days of big-fee diversified entrepreneurial medicine may be numbered. Employers will move to preventive services and a general emphasis on ambulatory care will shape practice. The competition between specialists, between specialists and generalists, and between physicians and physician-extenders is likely to be heavy. Younger physicians will have difficulty developing their practice through association with established physicians, and marketing skills may become as important as medical skills. All this combined with high tuition and long educational training should at least give pause to younger men and women who may retain mid-20th century romantic notions of medicine and visions of riches rather than the realities of the 21st century.

I believe that both medical schools and potential applicants must think about the near future. Each should consider their mission and goals. Is medical education as well attuned to the needs of society as it could be? I was disturbed to read in an official document regarding physicians who are scheduled to begin obligatory service with the National Health Service Corps, "Regular medical education and residency training do not adequately prepare physicians for practice in underserved communities." Is medical education being excessively influenced by high technology and emphasis on curative medicine? It would be unfortunate for society if education, research, and training did not encompass health problems related to longevity, to the heaviest burdens of illness related to matters of human behavior, to environmental health, to the epidemiology and etiology of disease in relation to nutrition, and to the unfavorable outcomes of the reproductive process, to mention but a few of the issues.

My experience in medical education, and now three years at a school of public health, have led me to believe that the fourth year of medical school could be utilized more profitably than is now the case for the majority of medical students. The weaknesses of this year, with its smattering of techniques, internship seeking, foreign travel, and so forth, are generally recognized. For many of the young men and women who will practice medicine for the next forty or fifty years, an in-depth examination of aspects of the health of populations could be invaluable to them and to society. More knowledge and skills in biostatistics and epidemiology could give them the tools for meaningful clinical research and also for critical thinking. Health care economics, environmental health, international health, decision analysis, cost containment, management skills, and other subjects would broaden students' horizons and facilitate their being problem solvers instead of part of the problem. Many could acquire an MPH as well as the MD degree and better participate in public health programs.

CONCLUSIONS

The experiments in medical education I have described had valuable and generally applicable conclusions.

First, the interface experiments demonstrated that release from the competition to gain admittance to medical school enhanced the educational opportunities for early-acceptance students. Medical schools should continue to encourage college students to study areas in addition to the required sciences. This is particularly important now because the applicant pool is dwindling and students therefore should feel less driven by competition. The evidence, as manifested by student interest, indicates that courses that explore social, moral, and health-care system problems are both popular and contributory to intellectual preparation for medicine.

Second, the reexamination of the premedical science requirements led, in many instances, to changes that better integrated the subject matter with successive sequences and related them to the health sciences. This had at least two consequences: the courses were less often seen as hurdles set in the path of premedical students than as logical precursors to accepted objectives; and, in some instances, the integration has led to reduction in time expenditure without sacrifice of appropriate knowledge and skills.

Finally, the interface experiments demonstrated the great strengths that emerge when the medical school and its parent university join forces in education and research. Not only was this apparent in the interdisciplinary approaches to subject areas, but it also led to emphasis on training of the mind and personality growth of students, and, I think, faculty also. The lesson for all schools is to reexamine their roots in the university and to gain and to give nourishment.

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MEDICAL EDUCATION

EDGAR A. VANDER VEER, MD

(*Reprinted from the New York State Journal of Medicine, 1921;21:173–5*)

The subject of Medical Education, with the issues growing out of it, public health insurance, public health centers, small hospitals, ranging in size from four to twenty beds, is a problem that I believe should be discussed by County Medical Societies in an endeavor to see if some more practical solution to the problem cannot be worked out.

Certain facts in the case are self-evident. The number of medical students as well as the medical schools themselves have decreased markedly in the last fifteen years and that it is altogether a good thing for the medical profession and the public at large has not yet been definitely determined. We hear over and over again the question asked "What has become of the good old family physician, why is he passing away?"

Is it because methods of living have changed and relations between families and their doctor have become less confidential than in former years? Partially so, but more I believe because the study of medicine has been made so difficult, expensive and time-consuming that the men from whom the class of the so-called family physician and country doctor is recruited, have neither the time nor money to enter the medical profession for which they have a liking and, in consequence, take up other callings that, while no more lucrative or dignified, still offer them the opportunity to sooner establish themselves on an income financial basis.

In the years past a promising young man from the farm, or engaged in other occupations, could after graduating from the high school enter upon his medical studies. He came from the farm, knew the hardships of country life, but he loved the country and the people and was only too glad to go back and serve them. But now all this has changed. A young man on the farm or in some similar calling cannot afford to study medicine. When he thinks about it, if he considers it at all, he is appalled by the time and expense it entails and takes up some other form of occupation. Up to within a short period a high school diploma has been looked upon as the minimum of premedical studies, but it has been shown that an additional study in physics and biology with organic chemistry has become very essential. Hence two years of additional work in a college of arts and science has been deemed necessary. Now when the young man has by great effort of self and family pursued these additional requirements and if he concludes to study medicine, then he feels he has spent so much on obtaining his education, that he must settle in a city and become a specialist with the prospect of more lucrative fees in order to compensate him for the financial outlay which he has made, to say nothing of the age at which he is beginning to take up his life work. I believe that this, in a very large measure, accounts for the dearth of physicians in the country districts rather than the disinclination of the physicians to suffer the hardships of a country practice. . . .

From this suggested condensing, and elaborating somewhat more the studies that enter into the preparation of the medical student, and as it applies to our high schools, I offer for consideration, could we not work out a minimum medical education that would supply the vacancies that are now developing in the out-of-the-way places of country practice? We must not deny that the smallest hamlet has the right to demand the best the State can afford, but it is not always possible for the best to remain in such localities, owing to inadequate remuneration, which is well understood when they have in mind beginning the study of medicine.

It has been stated in one of the early reports of the Carnegie Foundation Fund that the well-prepared and advanced practitioner is to be found in these obscure places, but a careful study of the census shows very few men from the Johns Hopkins and other like institutions. It is a mighty small fractional part of the makeup of the members of the medical profession who are to be found in these out-of-the-way places. Vacancies are occurring frequently. I would not have what I have presented in these suggestions interfere with the fortunate young man who is able to take the full four years in a college of arts together with the medical studies of to-day.

Some few years ago, in a discussion on this subject, it was endeavored to bring out a combined course for the baccalaureate and medical degrees, consolidating them in a six or seven years' course of study in universities that were prepared to follow this line of education. A few of the universities are yet pursuing this line of instruction, but it is not quite universally received with an approbation that seems to be encouraging. . . .

If the student could enter a school of medicine direct from the high school without the necessity of two years in a college of arts, though it would require more intense study, and which these earnest young men would willingly render, I believe that more young men would be glad to take up the profession, that they would make good physicians, and that the public, instead of suffering by so doing, would be greatly benefited. The statement is made that it takes two years of college education in order to train a young man properly how to study, but surely is not this the function of the high school? It ought to be that a young man contemplating the study of medicine could enter a medical college and obtain the degree of M.D. in the same length of time that a young man can obtain the degree of L.B.S. I mean as relatively an important preparation ought to be secured for the one as for the other degree.

Of course, everybody will agree that the more highly educated a physician is, the better physician he should be.

but in the final analysis it comes very largely to the individual equation and the man himself. Would it not be better to spend the time on the other end of the medical education, there to encourage those medical students who show special aptitude to spend two or three years in post-graduate medical work and let them become the consultants, diagnosticians, laboratory workers and specialists rather than to compel the whole medical student body to take up with special lines of medical work which may be distasteful to them and for which they have no special aptitude.

I still am firmly of the opinion that for a man to become a specialist in any line of medicine he should have at least five years' experience as a general practitioner. Nothing so enables a specialist to approach a case in a spirit of broadmindedness as the fact that he has been in general practice, and knows that a patient can have some disease outside of his own specialty. The same applies in surgery. I do not believe that a student should be allowed to graduate from a medical school one day, and the next day, or as soon as he has obtained his State license, be permitted to perform a major operation. But at the present time there is nothing to prevent it, and the public are bound to suffer in the end. To be sure the American College of Surgeons are doing all they can to remedy this and to educate the public to the gravity of the situation, but it is a slow process, and the public do not seem to show much enthusiasm in being educated. Now, if the two years which the student spends in the college of arts could be taken away from that end and added to the other end, and the student be compelled to spend these two years in the study of surgery with some good accredited hospital surgeon, before he was given his degree in surgery and allowed to operate, the public would be protected, less poor surgery would be done, and the whole tone of surgery would be elevated.

I believe that half of the agitation to-day for public health insurance, public health centers, public diagnostic clinics, is due to the lack of the good old-fashioned physician or country doctor, and this agitation will never be stopped till we have some reform in our medical education by which it can be made, not easier, but more advantageous in the saving of time and money to enter the medical profession. People seem to die in about the same degree of regularity and with the same diseases as they always did before the present form of medical education went into effect. The mortality rate to-day may, as a whole, be decreased somewhat, due I am told in a large measure to the decrease in the infant mortality rate. If they live to grow up to be weaklings and a charge on the State, then from a purely economic proposition, to say nothing from a humanitarian point of view, there is room for argument on the subject. Nature's law, the survival of the fittest, still holds good. . . .

Most men who enter the medical colleges do not expect to be professors in this or that branch of medicine, but I believe that is the tendency of present day medical education. Men are taught the refinements of medicine largely at the expense of the essential things. Has not the pendulum swung too largely from the side of too little education to that of too much education, and isn't it about time that it swings back to a happy medium?

Medicine can never be an exact science, never a science by education or in any other way. Medicine is an art, and always will be one, and if we shut out of it a certain class of young men who have studied human nature in the school of experience, because of the length of time and the cost that it would take before they receive a license to practice, we are depriving the public of more benefits than are obtained by too high premedical requirements. Small localities will become dissatisfied. It will tend to develop irregulars and fakirs.

Medical education—then and now

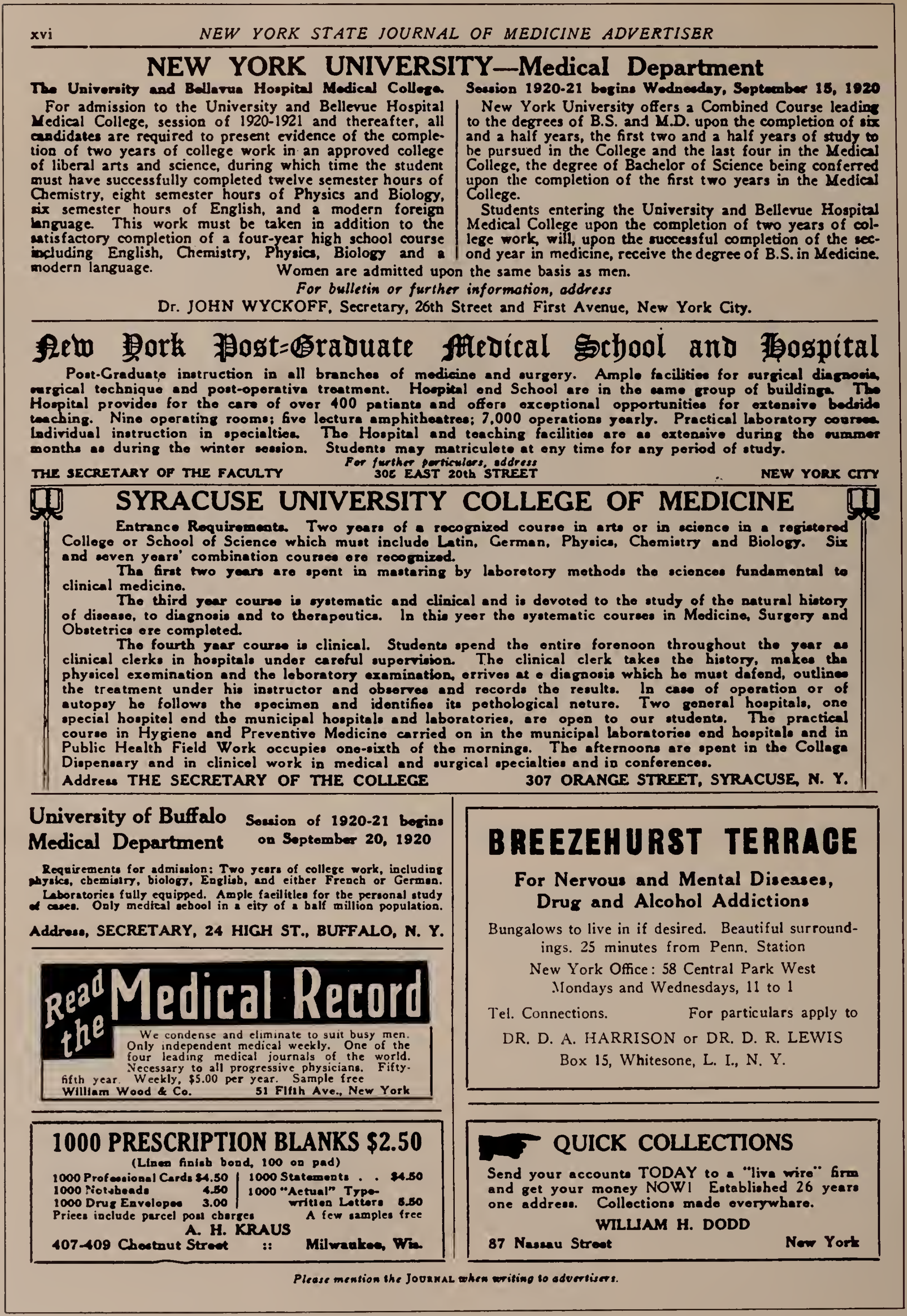
Some of the major problems confronting medical educators today include spiraling costs of premedical and medical school education, geographic and specialty maldistributions of physicians, the spectre of a physician surplus, and financial obstacles to medical education for the economically disadvantaged. The current immediacy of these problems tends to confuse many into thinking that they are new when in point of fact they are quite old.

The article, "Medical Education," by Edgar A. Vander Veer, MD, of Albany, New York, reprinted from the May 1921 issue of the *Journal*, demonstrates how many of our present medical education problems were current 62 years ago. It is important to understand that Dr Vander Veer's article reflected the ongoing and often heated debate that followed the landmark Flexner Report of 1910. This report, *Medical Education in the United States and Canada: A Report to the Carnegie Foundation for the Advancement of Science*, and the study that led to it were undertaken in response to the numerous serious problems that beset medical education in the early part of this century. It established a framework for medical education in this country that is still in place today.

At the time that Abraham Flexner, MD, began his studies of medical education in the United States and Canada, a large number of commercial (for profit) medical schools existed, especially in the southern states. Existing solely on tuition fees, these schools often lacked laboratory facilities and skilled teachers. They admitted individuals without a high school education and maintained low academic standards in order to graduate the majority of their enrolees. They generated what Flexner termed "an enormous over-production of un-educated and ill-trained medical practitioners."

In Flexner's time, the defenders of these schools argued their continued existence in the interests of the economically disadvantaged who could not afford the longer and more expensive courses of study offered by university medical schools. But Flexner argued "that the country needs fewer and better doctors; and that the way to get them better is to produce fewer." Flexner's conclusion won widespread

(Reprinted from the May, 1921 issue of the New York State Journal of Medicine)



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Following the Flexner report advertising by medical schools increased.

support from those who saw serious economic threats from this mass production of physicians.

Although the Flexner Report served as a reference point for the establishment of standards of all kinds in medical education around the country, it took a number of years for state regulatory bodies to translate these standards into law. Eventually most of the commercial medical schools were put out of business. But debates continued about various aspects of medical education, as evidenced by Dr Vander Veer's article.

He argues in favor of a shorter period of education in the interests of cost to students, claiming that poor farm lads simply couldn't afford the then recently lengthened period of study which in many instances meant two years of college and four years of medical school. The better medical schools had moved to requiring a college degree of applicants. There is no question but that these educational reforms put medicine out of the reach of the many who could not afford either the tuition costs or the luxury of being financially nonproductive for so long. Today the limited availability of student loans and spiraling tuition costs have put medicine out of the reach of a new generation of economically disadvantaged individuals.

Dr Vander Veer explains that the increased financial burdens of medical education were forcing many medical school graduates into higher paying urban specialty practices as opposed to rural general practice. The same situation pertains today because many medical students graduate with levels of indebtedness in excess of $40,000. He discusses six- and seven-year combined undergraduate-medical school programs, hailed by many in the 1960s as innovative. The reasons for their recent establishment had to do with the perception that there was a physician shortage and with the financial incentives provided by the federal and state governments to medical schools in the form of capitation grants.

As the recommendations of the Flexner Report took root, the pool of qualified applicants sharply dwindled. Thus, it is not surprising to find that energetic advertising was common on the part of well-established and respected medical schools. The sample of ads that is reprinted in this issue of the *Journal* is representative of the numerous ads that appeared during the teens and twenties. Many medical schools actively recruited qualified college students, explaining the merits of their schools over dinners in some of New York City's leading restaurants.

Dr Vander Veer's article is a refreshing reminder that many of our current problems in medical education are really very old ones, albeit with modern twists. But there are differences between 1921 and today. Flexner's solution to the excess of physician manpower was to produce fewer and better physicians by closing down the commercial medical schools. But today's excess and the next decade's even greater one largely consist of technically well-trained physicians. Specialty and geographic redistribution are already underway and constitute a partial solution. But a significant problem will remain that will require imaginative, equitable, and humane solutions that cannot be found in the experience of the past.

PASCAL JAMES IMPERATO, MD
Deputy Editor

Male sexual dysfunction and diabetes mellitus

Multidisciplinary approach to diagnosis and management

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INTRODUCTION

There are between five and 15 million impotent men in the United States. Impotence is between two and five times more common in diabetic men than in nondiabetic men.[1] Diabetes millitus is the single most common cause of impotence. Between two and five million adults and adolescents have diabetes, and 20% of diabetic men aged 20 to 30, 50% aged 50 to 60, and about 60% aged 60 to 70 are impotent.[2]

It was previously estimated that 90% to 95% of men suffered from impotence on a psychogenic basis.[3] With the recent advent of sophisticated methods of investigation, organic causes have been documented in approximately 50% of cases.[4]

Potency is defined as the ability of the man to obtain and maintain an erection satisfactory for sexual intercourse. Usually, the main problem in diabetic men is their inability to obtain and maintain an erection despite normal libido and normal ejaculatory ability.

Impotence may be primary or secondary. Primary impotence implies that the man has never had an erection. Most often, patients have secondary impotence which is caused either by organic or by psychologic factors. This is the case in diabetic men in whom impotence may occur in three forms: as a first symptom of diabetes; secondarily, after several years of diabetes; or as a temporary phenomenon associated with poor control of the diabetes. However, it should be stressed that not all diabetic patients will become impotent and that even if diabetes is present the dysfunction may be wholly psychogenic.[5]

COMPONENTS OF MALE SEXUAL FUNCTION

Erection. Sexual function depends on the interplay between psychic, hormonal, neurologic, and vascular responses. Penile erection is an active vasomotor reflex under the control of the autonomic nervous system through the nervi erigens and pudendal nerves which emerge from the spinal cord at the location of the second to fourth sacral vertebrae. An errection occurs as a result of stimulation of the sexual reflex, initiated by tactile stimulation of the genitals or psychogenic stimulation. Passage of nerve impulses to the nervi erigens then causes dilatation of the arteries of the penis and engorgement of corpora cavernosa with blood.[6]

In the diabetic patient, the cause of impotence is not clear. The prevailing opinion is that the impotence is due to a neurogenic mechanism and not related to vascular insufficiency. The most likely causes are metabolic imbalance, parasympathetic or sympathetic autonomic neuropathy (diabetic microangiopathy affecting the autonomic nervous system),[7] and vascular insufficiency of the blood supply to the penis[8] or abnormalities of the autonomic nervous fibers of the corpora cavernosa.[9,10] There is no medical treatment to correct erectile impotence caused by progressive autonomic neuropathy or vascular insufficiency.

Ejaculation and libido. Ejaculation, seminal emission, and penile erection are regulated by different parts of the nervous system. Ejaculation is due to contractions of the somatic muscles of the pelvic floor (bulbocavernosus and ischiocavernosus muscles) which are innervated by the somatic spinal nerves from the second to fourth sacral vertebrae, via the pudendal nerve. Seminal emission is due to contraction of the internal bladder sphincter which is mediated by sympathetic nerve fibers from the 11th thoracic to second lumbar vertebrae. As a result, penile erection can occur in the absence of orgasm or ejaculation and, conversely, orgasm can occur without ejaculation due to selective nerve damage.

Diabetic patients sometimes have failure of the reflex closing of the internal bladder sphincter as part of the autonomic neuropathy, resulting in retrograde ejaculation.[11] This may precede impotence and usually does not revert with control of the diabetes. However, it usually occurs later when the erectile impotence is already established. Early retrograde ejaculation can sometimes be treated with anticholinergic and antihistamine drugs.

Because the nerve supply required for orgasm and ejaculation is different from that required for erection and is usually undamaged in the diabetic man with erectile impotence, he may achieve orgasm and ejaculation with a partially tumescent or flaccid penis. Conversely, retrograde ejaculation can take place in the presence of normal erection during intercourse or masturbation. Because the impotent man with diabetes as the cause of his impotence usually has as orgasmic sensation and normal libido, he is prone to more anxiety when faced with his continued inability to obtain

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From The Association for Male Sexual Dysfunction, a private practice association of physicians and health professionals in New York City.

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satisfactory erections.

Fertility. Either impotence or the inability to ejaculate may be causes of a barren marriage. However, the diabetic man with impotence may still have ejaculation without erection and can cause pregnancy with vaginal intromission and ejaculation with a semierection. Alternatively, the diabetic patient might not have erectile impotence, but have retrograde ejaculation due to diabetes, which can cause apparent infertility. Therefore, all diabetic patients who are desirous of obtaining children and are of child-fathering age should be reassured that fertility itself is not decreased. Thus, it is important that the urologist investigating a barren marriage, particularly if the man is diabetic, determine if retrograde ejaculation is present. The semen can be recovered from the bladder by catheterization and the wife inseminated with the husband's semen.

Medical Management and Control of Diabetes

The merits of strict diabetic control in preventing development of diabetic microangiopathy and neuropathy are controversial. However, it is generally believed that good control may minimize progression of diabetic microangiopathy and neuropathy, and that the diabetic patient who has latent diabetes undetected for a long period of time has a poorer prognosis than the diabetic patient who has erectile impotence associated with ketoacidosis or hyperglycemia due to lack of control. Some physicians believe that men with severe and brittle diabetes are the most susceptible to the development of erectile impotence. It is not clear whether impotence in the face of poorly controlled diabetes is a result of the poor control itself or of the malnutrition and generalized weakness characteristic of these patients. In the absence of a clear answer to this question, these patients should be restored to normal metabolic balance, to the extent that this is possible, to regain their normal health and vigor.

The diabetes should be controlled by traditional dietary recommendations, insulin, or oral hypoglycemic agents. If control with oral agents is not satisfactory, and the patient has complied with diet and medication, then insulin should be started. In some of these patients, potency might return following initiation of diabetic therapy. In most patients, however, there appears to be little correlation between the control, duration, or severity of the diabetes and the occurrence of impotence; and in spite of fairly good control, many patients with diabetes do become irreversibly impotent. In patients with long-standing advanced diabetes with or without severe atherosclerosis, impotence may not be improved with diabetic treatment because it may be due to decreased pelvic blood flow or decreased blood flow to the penis. These patients are irreversibly impotent. At the present time, reconstructive vascular surgery generally has not produced satisfactory long-term results in patients with vasculogenic impotence.[12] In many instances, patients with autonomic neuropathy or vascular insufficiency are candidates for penile prosthetic implantation.

The notion that diabetic impotence is associated with androgen deficiency has been discarded. Therefore, there is no physiologic justification for treating impotent diabetic patients with male hormones such as testosterone or with gonadotropins unless a low testosterone level or an increased estrogen/testosterone ratio has been documented. In diabetic men, as in all patients with impotence, it is important to exclude as causes of impotence pituitary dysfunction,[13] an elevated prolactin level[14] which is not necessarily associated with a pituitary tumor,[15] and thyroid or adrenal dysfunction.[16]

Psychogenic impotence is characterized by its sudden onset. Potency may return only to disappear again or the patient may be impotent with some partners but not with others. Factors frequently responsible are family problems, job fatigue, depression, boredom, and lack of sexual interest between husband and wife. Patients with psychogenic impotence have nocturnal erections and normal testicular sensitivity, and they can masturbate with erections. Anxiety, whether due to immediate problems or to remote events, is the predominant emotion that can negatively affect sexual performance.[17] Diabetic men have neither a higher nor a lower incidence of psychogenic impotence then nondiabetic men.

Role of family physician and internist. Because impotence may be the presenting symptom of undiagnosed diabetes in as many as 12% of patients complaining of impotence,[2] it is essential that a careful medical workup be instituted in all patients with erectile impotence.

The physician's role in the management of sexual dysfunction is threefold: (1) to diagnose the cause of the disorder, (2) to treat the underlying disease, and (3) to act as a sex counselor and to advise the patient and his sexual partner how to cope with the disability.[18]

Up to 50% of diabetic patients with impotence have a significant amount of psychogenic overlay due to fear, guilt, hostility, stress, worry, or fatigue that is responsible for their impotence and is frequently responsive to sex therapy.[19] The principles of sex therapy include improving the communication between the partners, teaching the partner proper cooperation, removing pressure for male performance, bringing performance fears to the surface for therapy, teaching patients to deal with the fears, reeducation in sexual function, and modifying behavior to achieve desired responses.[20] The family physician or internist may choose to refer the patient for more specialized diagnosis and therapy to a diabetologist, urologist, marital counselor, sex therapist, psychologist, or psychiatrist.

Role of the counselor. Most patients with organic impotence have some component of psychogenic overlay and might benefit from marital counseling, if marital difficulties or interpersonal problems are implicated, or from sexual counseling and sex therapy.[21]

During sex therapy, inquiry is made into the patient's sexual history, myths and misconceptions are corrected, and sexual and verbal communication is encouraged between the partners. Great emphasis is placed on pleasure and relaxation during love-making. Fears, including those of rejection, inadequacy, or inferiority can cause performance anxiety which is a common cause of sexual dysfunction; therefore performance is deemphasized. These causes of anxiety and the defense mechanisms that result may be effectively treated by sex therapy. Frequently, sex therapy involves treatment of both partners, but it can be offered to individuals without partners. If the patient is markedly depressed or suffers from another serious psychiatric disorder, he should be referred to a psychiatrist. If psychiatric intervention fails, then penile prosthetic implantation might be considered.

Role of the Urologist. The urologist frequently sees patients with sexual dysfunctions. Like the primary physician, the urologist should reassure the patient and reestablish his self-esteem, and also like the primary physician, the urologist should be aware of the principles of sex therapy used to treat psychogenic impotence. However, many urologists prefer to refer patients with psychogenic impotence for marital or sex therapy.

The urologist is in a good position to integrate the results of the numerous diagnostic tests and evaluations needed to ascertain the cause of the sexual dysfunction and the type of treatment required. A comprehensive evaluation employing a multidisciplinary "team" approach is often valuable. Such a team consists of specialists in marital therapy, sex therapy, endocrinology, urology, psychiatry, neurology, vascular surgery, and sleep investigation.[4,22,23]

If the impotence is psychogenic and the patient refuses marital counseling, sex therapy, or psychotherapy; or if the impotence is psychogenic or psychiatric and is irreversible by marital counseling, sex therapy, or psychotherapy; or if the impotence is irreversibly organic—then consideration should be given to penile prosthetic implantation after the patient and his sexual partner have been informed of alternative sexual methods that do not require penile-vaginal intercourse. These alternatives, however, are difficult for patients and partners to explore and accept. If the patient has psychogenic or psychiatric impotence, sex therapy or psychiatric consultation should precede penile implantation.[24,25]

History. It is essential to get a detailed sexual history from the patient and his partner, possibly with the aid of a sexual function questionnaire (copies available upon request from authors).

The physician will wish to know whether the impotence is intermittent, and present only in certain situations, or whether it is persistent, progressive, and unrelated to special situations or sexual partner. The physician should inquire whether the patient has morning or night erections and is able to respond to erotically stimulating events or to mastsurbation. The physican will wish to know whether the impotence is associated with shame, feelings of insecurity, inadequacy, guilt, hostility, and a fear of intimacy, and he will wish to rule out depression. He should question the patient regarding his ability to urinate because of associated problems involving the urinary bladder in diabetic patients. He should ask whether or not the patient has numbness and tingling in the legs and burning sensations.

Most commonly, the clinical picture of impotence in the diabetic man is gradual, progressive, and irreversible by anything short of penile prosthetic implantation. This progression may take from months to several years.

Physical examination. A general physical examination should focus on the vascular and neurologic systems and should include careful examination of the genitalia, the penis and scrotum, cremasteric, bulbocavernous, anal and abdominal reflexes, and perianal sensation and sphincter tone.

The vascular examination should include palpation of all lower extremity pulses and listening for bruits. Skin texture, color, and temperature should be assessed.

Neurogenic vesical dysfunction is the most frequent clinical complication found in association with diabetic impotence. A fairly reliable test, when positive, to differentiate organic from psychogenic impotence in the diabetic patient is to palpate the testes and determine whether testicular pain and sensitivity is reduced. If it is reduced, impotence is very likely a result of diabetes and due to the simultaneous damage of the nerves of the testes and nerves of erectile function. Many impotent diabetic men with an organic cause have other manifestations of diabetic neuropathy such as peripheral nerve damage of the legs resulting in pain, abnormal sensations, absence of deep tendon reflexes such as ankle jerks, and diminution or absence of sensations of the legs and feet.

Laboratory tests. Because patients may have diabetic impotence without any known preceding abnormality of the blood glucose level, patients without an obvious cause for impotence should have a three-hour glucose tolerance test even if the fasting blood glucose level is within normal limits. Other tests used to differentiate the many causes of impotence are: complete blood count, SMA-12, urine analysis, and serum hormonal assays including testosterone, total estrogen, lutenizing hormone (LH), follicle-stimulating hormone (FSH), prolactin, thyroid function tests, and cortisol levels, and occasionally skull x-rays (sella turcica).

Differential diagnosis. Although the physician should consider diabetes as a possible cause of unexplained impotence, he must be certain that the patient with diabetes and impotence has impotence because of the diabetes and not from another cause. Indeed, 50% of patients have multiple causes contributing to their impotence,[4] but 50% of patients with diabetes and impotence are impotent due to their diabetes specifically.[26] In spite of the development of impotence after an unsettling life event, or the history of occasional early morning erections and sporadic successful intercourse, one must consider nonpsychogenic causes (see Table). In the past, patients have received sex therapy and even psychotherapy for unrecognized organic causes such as diabetes.

MEASUREMENTS OF ERECTILE FUNCTION

In the last several years, new ways of measuring erectile function and dysfunction have allowed a clearer distinction to be made between organic and psychogenic impotence.

Nocturnal penile tumescence. Sleep laboratories have noted that normal males from infancy to senility have rapid eye movement (REM) sleep during which penile erections occur approximately four to seven times per night. These nocturnal erections are easily measured at a sleep facility or in the patient's home, usually for one to three nights. The periods of tumescence are recorded on a strip of paper similar to an electrocardiogram. If the patient has good morning erections, then nocturnal penile tumescence NPT measurement is usually not necessary. However, if these unconscious, uninhibited erections are present during sleep, then the impotent diabetic patient must be carefully evaluated for psychogenic factors which might be the cause of his impotence. Men with organic impotence due to diabetes have absent or abnormal nocturnal erections, similar to their

Organic Causes of Impotence

Nonsurgical
- Diabetes
- Endocrinopathies
- Atherosclerosis
- Cirrhosis
- Chronic renal disease
- Multiple sclerosis
- Transverse myelitis
- Parkinson's disease
- Epilepsy
- Peyronie's disease
- Priapism

Surgical
- Radical prostatectomy
- Radical cystectomy
- Abdominal-perineal resection
- Aortoiliac surgery
- Bilateral orchiectomy

Other
- Congenital penile vascular or structural abnormalities
- Penile trauma
- Pelvic trauma and fractures
- Spinal cord trauma/tumors
- Alcoholism
- Drug side effects: antidepressants, tranquilizers, and antihypertensives
- Drug abuse
- External beam radiation to the prostate

erections during their attempts at sexual intercourse.[27] However, occasionally psychologic factors can inhibit NPT during NPT studies.[28] Recently, screening methods requiring only postage stamps[29] or a Velcro band wrapped around the flaccid penis at bedtime have been used to determine the presence of nocturnal erections.[30] If the perforations or the snap elements of the band are broken in the morning, it is assumed that erection took place during the night.

As a result of these studies, it has been found that many diabetic men have normal erections during REM sleep. In these patients, the illness itself might make the patient prone to ill health and temporary impotence. Conversely, because many diabetic men know that impotence may be a permanent complication of their disease, resulting anxiety can cause dysfunction. Thus, it is wrong to assume that all diabetic patients with erectile impotence have impotence due to diabetes. If the patient has normal or near-normal NPT, the patient should be advised to seek sex therapy or psychotherapy.

Penile blood pressure, pudendal arteriography, phalloarteriography, and corpus cavernosography. In patients with diabetes and impotence, abnormal blood flow in the penis can occur without evidence of blood-vessel problems. Several studies indicate that vascular causes of impotence exist in between 25% and 45% of all patients suffering from erectile impotence.[31,32] Because impotence may be due to penile arterial insufficiency, the Doppler technique is useful in determining penile blood pressure. When diabetes is the basic cause of impotence, penile blood pressure may be normal or low.

In addition, the penile vasculature may be examined by pudendal arteriography,[33] and phalloarteriography,[34] which respectively demonstrate the blood vessels supplying the penis and the penile arterial bed. Corpus cavernosography demonstrates structural abnormalities[35] and vascular outflow[36] from the penis. Pudendal arteriography, phalloarteriography, and corpus cavernosography are rarely indicated in diabetic patients.

Pudendal nerve latency time, electromyography, and cystometrogram. Direct penile innervation may be tested by measurement of the pudendal nerve latency time,[37] which is a more sophisticated test than the bulbocavernosus reflex, or it may be combined with cystometry[38] and electromyography.[39] Increased latency times are indicative of neurologic lesions, such as those caused by diabetes, which interfere with the sacral reflex arc. However, in some men with diabetes and other evidence of autonomic dysfunction or peripheral neuropathy, latency times may be variable. Because the nerves concerned with potency and micturition are related, and because diabetic impotence is frequently accompanied by neurogenic vesical dysfunction, abnormal emptying of the urinary bladder is often demonstrated on cystometrograms in patients with diabetic impotence. Neurogenic vesical dysfunction does not appear to be related to age or to the duration of the diabetes.

The diagnosis of psychogenic impotence should be withheld until these tests and investigations have been considered or performed in patients with diabetes. Similarly, the impotence should not be attributed to the "natural aging process" without first performing appropriate diagnostic tests. From a cost-effective viewpoint, extensive medical, psychologic, or surgical treatment should be withheld until a comprehensive evaluation has established the cause of impotence.[4,22]

PENILE PROSTHESES

The recent awareness of the availability of satisfactory silicone and silastic penile prostheses for the treatment of erectile impotence has contributed to the increased numbers of patients coming to physicians and other health professionals for help for this sexual dysfunction. Since they are highly motivated, patients with diabetic impotence are one of the largest groups of men who are suitable candidates for penile prosthetic implantation. Sometimes, marital therapy, sex therapy, or psychiatric therapy before implantation will make the patient a better surgical candidate. However, the patient and partner must be cautioned not to expect penile implantation by itself to improve a relationship. Only after an irreversible organic cause, such as diabetes, is documented; or if marital therapy, sex therapy, or psychotherapy has been refused or failed in a patient with psychogenic impotence, should he be considered for penile prosthetic implantation.

The candidate for penile implantation should have a strong libido, a desiring sexual partner, and reasonable health. He and his sexual partner should be fully aware of the advantages and disadvantages and the possible complications and risks from each type of prosthesis. The types of prostheses available and their advantages and disadvantages have been discussed in a previous article.[40] The patient's wife or sexual partner should be counseled before and after surgery.[41] Unrealistic expectations will result in failure of patient-partner satisfaction after implantation with any type of penile prosthesis. It is useful to have the prospective patient for implant surgery speak with another patient who has undergone this surgery and who is willing to discuss his experience.[42]

Before implantation, the patient should undergo a comprehensive multidisciplinary evaluation and screening regardless of the cause of impotence.[23] Because patients with organic impotence such as diabetes may have significant psychogenic overlay, some urologists suggest that all patients should be evaluated from a psychologic standpoint before surgery.[24] This evaluation is important not only in establishing the cause of the impotence and to uncover any psychologic contraindications to surgery, but also in planning and assessing the patient's postoperative prognosis, psychologic adjustment, and rehabilitation. Additionally, such an evaluation assesses the patient and his partner's motivation for surgery. Psychologic screening may be accomplished by multiphasic questionnaires such as the Minnesota Multiphasic Personality Inventory (MMPI) or the Derogatis Sexual Functioning Inventory (DSFI) or by a psychiatric interview.[43-45]

Since the introduction of antibiotic protocols in diabetic patients undergoing penile implantation, the infection rate has dropped from about 15% to approximately 1%.[46] The incidence of infection after penile implantation in the diabetic patient is probably the same as in the nondiabetic patient.[47] In the past there was concern that a foreign body implanted in a diabetic patient would result in rejection of the prosthesis and infection. This has not proved to be the case. However, it is essential that the diabetes be well controlled before operation and that any urinary tract infection, either asymptomatic or symptomatic, be treated before implantation. Naturally, insertion of any type of penile prosthesis will not affect fertility, nor will it affect orgasmic sensation or ejaculation, if these were present before implantation. Conversely, if orgasm or ejaculation was absent before operation, insertion of penile prostheses will not restore these functions. Diabetic patients can be successfully treated for erectile impotence with penile prostheses if they are properly screened and selected, if the patient's and partner's expectations are realistic, and if they are fully informed of the advantages and disadvantages of each type of prosthesis. Implantation of penile prostheses is a good method of treating organic impotence due to diabetes. To date, approximately 100,000 impotent men, including about 40,000 diabetic men, have received penile prostheses.

CASE REPORT: Sexual Dysfunction in a sex therapist

A 52-year-old psychologist and sex therapist had a 15-year history of diabetes mellitus. He had difficulty with erections for ten years. His sexual dysfunction had developed gradually, first with difficulty holding back ejaculation and later with premature ejaculation. Shortly thereafter, he developed erectile impotence. During the last three years, with rare exceptions, he had no morning or night erections, occasional parasthesias, cramping and painful sensations on the posterior aspect of the legs, difficulty initiating micturition, and significant nocturia. He rarely was able to obtain vaginal penetration due to the exceedingly poor tumescence and then only after extended foreplay including oral sex. He had been in psychotherapy and then psychoanalysis for seven years without improvement of his erectile dysfunction. He had been treated with 10 units of regular insulin and 15 units of NPH insulin in the morning for the last two years.

Neurologic consultation failed to disclose a cause for his erectile impotence, but a mild symmetrical sensory polyneuropathy consistent with his diabetes was noted. Hormonal assays for testosterone, total estrogen, LH, FSH, prolactin, thyroid function tests and cortisol levels were negative. Therefore, he underwent three nights of nocturnal penile tumescence study which demonstrated marked impairment of nocturnal erections. It was concluded that the impotence was due to diabetic neuropathy.

In view of the failure of improvement of his erectile capability after extended medical and dietary management of his diabetes, failure of psychotherapy and psychoanalysis, and considering the recommendation of his therapist that the patient was a suitable candidate for penile prosthetic implantation, he underwent implantation of the inflatable Scott penile prosthesis. He had an uneventful postoperative recovery and subsequently has engaged in satisfactory sexual intercourse.

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IN THE DAILY PRESS

Enough is enough, Mr. Watt

James Watt should have been booted from federal office long ago. Better late than never, before the Interior secretary gives away the country's storehouse of natural treasures and before he spouts any more bigoted banalities.

Watt outdid himself Wednesday at a U.S. Chamber of Commerce breakfast in Washington. Upset over a Senate vote barring him from leasing more federal land for coal mining, pending an overdue policy review, Watt went on a tirade, insulting at least four groups at once.

He assured the audience that he's being advised on the issue by "every kind of mixture . . . I have a black, I have a woman, two Jews and a cripple. And we have talent." In addition, he lamented having to deal with Congress on energy matters when "the world is ready to ignite."

The former remark drew chuckles from the assembled trade association executives, but it isn't funny. Later, lambasted from all sides, Watt apologized and conceded his words were "unfortunate." That's the least of it.

The Reagan administration has been trying hard to woo minority and women voters for the 1984 election. It's plumb stupid to allow Watt to keep his platform and make such blatantly racist, sexist, ethnic and otherwise demeaning slurs.

But the only time the administration saw fit to slap Watt's wrist was when he incensed Nancy Reagan and White House officials this summer by criticizing the Beach Boys.

Seven years ago, former Agriculture secretary Earl L. Butz had the sense to resign after he slandered blacks in a private conversation with a reporter, by saying all they were interested in was good sex, loose shoes and a warm place to defecate.

Watt should be made to follow him to the woodshed, and from there, out the back door.

—Editorial
The Sun Bulletin, Binghampton, NY
September 23, 1983

AN APPRECIATION

Who wears white shoes in winter?

LOIS GREEN STONE

I'm not a nurse, lawyer, psychologist, accountant, or any professional who can advise those in health careers. I teach English at a college, and self-help is missing from this essay.

In 1956, I married a third-year medical student and moved from New York to Nashville, where I taught high school. It seemed as if the male medical students wed either teachers or nurses. The difference to us was that teachers made $2,900.00 a year and nurses $200.00 a month. I never understood why one salary was compounded annually, the other reported in twelve segments.

I didn't see too many wives playing out roles other than "Mrs." The nurses, who also saved money by sharing the spouse's cafeteria meal, wore sensible shoes, while I picked from my mate's plate shod in the same patent leather heels I'd taught in; my feet hurt.

Not too many kind words were said about nurses. Teaching and a college education were equated, which separated the intelligent woman from one in a white cap.

By the time my husband went into private practice, I'd delivered three babies and my identity came with magazine by-lines. I wrote amid toys, diapers, and dirty dishes I'd do an hour before bedtime. My only escape from the house was when my husband's nurse got sick and I'd find a sitter and work at his office.

Except for doing EKGs and giving injections, I typed, filed, billed, mounted EKGs, did simple lab work, cleaned up soiled linen, straightened examining rooms, weighed people, washed urine bottles, answered the phone, smiled.

Nursing, for me, became a more noticeable occupation with hemodialysis. My husband helped initiate this program in the 1960s for Western New York State. A single treatment lasted ten hours and blood was required to prime the pump. The dialysis room had once been a storage closet, yet the nurses managed the machinery and the coffee pots with ease, almost as if there was space where really none existed. I also began to notice people-in-white not just as a skilled and talented group but as individuals who bring a quality of life to a job.

My oldest child, a son, will have his Doctor of Medicine degree in 1985. When my middle offspring, a daughter, talked about nursing, a well-meaning friend implied she was too intelligent not to try for a medical degree also. She graduated in May 1982, from the University of Pennsylvania, *summa cum laude* in psychology.

Also that month, my husband underwent a laminectomy. He had had an anaphylactic reaction to the myelogram dye preceding surgery, and I was scared. A hospital nurse sat with me offering companionship during the procedure.

The point of this is that nurses do essential and outstanding work. My daughter began nursing school in September 1983. She is older than her classmates but is excited about the maturity she now has, to say, "This is what I want to do." She could complete law school, for example, in only six months more than it shall take her to become a nurse.

"Get up in the morning feeling pleased with the job you are going to do" has been a household slogan. Nursing offers constant challenges, a dynamic learning environment, and above all a feeling of self-worth.

I'm awed by her initiative, envious of her youth and enthusiasm, inspired by her determination . . . and a bit jealous, as I release my suede pumps from my swollen feet, that she'll be able to wear sensible white shoes all winter.

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FROM THE LIBRARY

NURSES DEMAND RECOGNITION

The New York State Nurses' Association demands legislation recognizing nursing as a profession. Legislation will prevent the probationer or pupil dismissed for unfitness from donning a uniform and calling herself a trained nurse, thus imposing on the public and endangering the lives of the patients.

NY State J Med 1902; 2: 285.

Electromechanical dissociation after intravenous verapamil

MICHAEL B. CLARK, MD, EDWARD M. DWYER, JR, MD

[*See also Commentary p. 1149*]

Verapamil hydrochloride, a calcium channel blocking agent, has recently become commercially available in this country in intravenous form for conversion of paroxysmal atrial tachycardia and for control of rapid ventricular rate in atrial flutter or fibrillation. Its clinical efficacy is well documented, and reported side effects few.[1] Untoward effects seen with this agent relate mainly to its potent effect on the cardiac conduction system, especially in association with beta blockade.[2,3] Rarely, hypotension and pulmonary edema have been reported and attributed to vasodilatory and negative inotropic actions of verapamil.[4] The purpose of this report is to describe the occurrence of electromechanical dissociation following intravenous administration of verapamil.

CASE REPORT

A 63-year-old woman, admitted to the emergency ward with a four-day history of intermittent chest pain, palpitations, and dyspnea on exertion, was found to be in atrial fibrillation with a ventricular response rate of 200 beats per minute. Digoxin, 0.25 mg, had been prescribed one year previously after evaluation of similar complaints at another hospital but was discontinued by the patient soon after discharge. Occasional episodes of chest "heaviness" and palpitations were reported over the past year; all had resolved spontaneously without medical attention. There was no history of hypertension or diabetes mellitus. At the time of presentation, the patient was taking perphenazine, 1 mg every other day and amitriptyline hydrochloride, 50 mg twice a day, medications prescribed four months previously after a "nervous breakdown."

When initially examined in our emergency ward, she appeared comfortable, without dyspnea or cyanosis. Her blood pressure was 90/60 mm Hg; intermittent bibasilar wheezes without rales were heard; no cardiac murmurs or gallops were appreciated. Her neck veins were not distended; no hepatomegaly or peripheral edema were present.

For the purpose of slowing the ventricular response, verapamil, 10 mg, was given intravenously over a 15-sec interval. While the electrocardiogram demonstrated some slowing of the ventricular response, the patient began to complain of severe shortness of breath. Three minutes after verapamil administration, the rhythm converted to a sinus mechanism with a PR interval of 0.22 sec and a heart rate of 120 beats per minute. However, despite persistence of normal sinus rhythm, the patient's clinical state rapidly deteriorated. Within two minutes after conversion to sinus rhythm, she was unresponsive and apneic; her blood pressure was unobtainable, and there were no audible heart sounds. Examination of her lungs demonstrated more marked wheezing bilaterally; no rales were audible. Calcium chloride given intravenously as well as an infusion of dopamine hydrochloride were both without effect. After 20 minutes of resuscitative efforts, her pulse returned. The blood pressure returned rapidly to 90/60 mm Hg while spontaneous respirations and consciousness returned more gradually over the next several minutes. Laboratory tests performed soon after the acute episode revealed a serum potassium of 5.4 mEq/L. Her BUN was 58 mg/dL, with a serum creatinine of 1.6 mg/dL, suggesting prerenal azotemia.

The patient recovered completely, without evidence of myocardial infarction either by serial electrocardiograms or cardiac enzyme determinations. A subsequent cardiac catheterization showed a large posterobasal ventricular aneurysm and severe triple vessel coronary atherosclerotic disease. Two subsequent episodes of atrial fibrillation with a rapid ventricular response were treated with electrical cardioversion without incident.

DISCUSSION

Intravenous verapamil hydrochloride may soon become the drug of first choice for conversion or control of ventricular rate in supraventricular tachyarrhythmias. Reports of its use in patients without significant heart disease,[5] in patients with mild-to-moderate left ventricular dysfunction,[6] in patients with recent myocardial infarction,[7] as well as in patients in shock[8] have demonstrated its efficacy. Adverse effects in these studies, if noted at all, were insignificant.

This positive experience has not been universal, however. Mangiardi and associates[3] demonstrated a 24% decrease in mean aortic pressure, as well as decreases in cardiac output and left ventricular pressure development in dogs at plasma verapamil concentrations considered to be within the therapeutic range. Chew and coworkers[4] noted a 17% increase in pulmonary capillary wedge pressure when verapamil was given to patients with acute infarction. They also reported three patients with severely reduced left ventricular functional indices and elevated wedge pressures who experienced, after therapeutic intravenous doses of verapamil, marked decreases in mean arterial pressure and stroke volume, as well as abrupt increases in wedge pressure leading to clinical heart failure. Asystole after intravenous verapamil use has been reported in association with beta blockade.[2] Severe hemodynamic and electrocardiographic effects have also been seen as a consequence of acute verapamil poisoning.[9]

Our patient experienced rapid cardiovascular deterioration leading to total circulatory collapse, temporally related to the use of intravenous verapamil, after the apparently successful conversion of her supraventricular tachycardia to sinus rhythm. To our knowledge, this sequence

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of events has not been previously described. The hemodynamic effects of verapamil when given intravenously reach a maximum at three to five minutes after administration, and decline rapidly thereafter.[10] This timing coincides with the deterioration and subsequent recovery of our patient. The fact that subsequent episodes of atrial fibrillation with rapid ventricular response did not reproduce electromechanical dissociation when drug therapy was withheld further implicate verapamil as the responsible agent. The development of acute pulmonary congestion, as manifested by severe shortness of breath and wheezing, along with the apparent absence of effective circulation, suggest that both the vasodilatory and the negative inotropic actions of verapamil combined to produce the syndrome of electromechanical dissociation. Intravenous infusions of calcium and catecholamines were ineffective in reversing our patient's circulatory collapse; calcium gluconate and epinephrine have been used successfully in cases of verapamil poisoning.[9]

The use of verapamil has been studied for 20 years; yet full characterization of the subsets of patients at risk for adverse reactions with verapamil use is far from complete. Our experience suggests that the need for intravenous verapamil be carefully assessed prior to its use in patients with a history suggestive of or with clinical evidence of left ventricular dysfunction.

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Small-vessel vasculitis following simultaneous influenza and pneumococcal vaccination

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The indications for use of influenza vaccine and pneumococcal vaccinations are nearly identical, and it has become common practice to administer them simultaneously, especially in older patients. This practice has been shown to be safe and efficacious, with only a mild increase in side effects of the vaccines over single administration.[1-3]

Reactions to influenza virus vaccines produce relatively few reactions in adults. The most common are local reactions, with erythema and induration in the injection site. Systemic reactions seem to be few and usually consist of fever and generalized malaise. Other reactions that seem to be allergic, with responses such as flare and wheal or various expressions of hypersensitivity, occur extremely rarely, usually in individuals who are allergic to egg protein, which is a component of the influenza vaccine.[4]

Pneumococcal vaccination has a similar low rate of reactions, and these are mostly of the local variety including discomfort, erythema, and induration at the site of injection. Systemic side effects are very infrequent and are usually similar to those of the influenza vaccine.[5]

In the following case report, small vessel vasculitis may have been caused by the simultaneous administration of influenza and pneumococcal vaccines. This possible side effect has been previously reported after influenza vaccine,[6,7] but not after pneumococcal vaccine.

CASE REPORT

A 71-year-old housewife was admitted with abrupt onset of swelling and pain in both hands, in the right elbow, and in the right knee. She had a fever the night before admission, felt generally fatigued, and complained of myalgia, especially in the back and shoulders. Eight days before admission, she received trivalent influenza virus vaccine, types A and B (A/Bangkok/1/79 [H3N2], A/Brazil/11/78 [H1N1], B/Singapore/222/79) and polyvalent pneumococcal vaccine (Lederle). Both vaccines were given in the recommended dosages.

In the hospital, physical examination revealed swelling in the right elbow and right knee, and a rash which began on both calves and spread to most of the legs and trunk. The rash was erythematous and macular with lesions less than 1 cm in diameter. A few were papular and palpable. Laboratory evaluation included a sedimentation rate of 44, a WBC of 6,200 with a normal differential but rouleaux formation on peripheral smear, normal results of serum protein electrophoresis, hemoglobin 13.9 g/dL, hematocrit 41%, normal values for electrolytes, BUN, prothrombin and partial thromboplastin times, negative test results for hepatitis B surface antigen and rheumatoid factor, and normal complement levels (C3, C4, CH50). Antinuclear antibody titer was 1:80 with a speckled pattern. Urinalysis was normal as was the patient's serology for syphilis.

Results of immunoelectrophoresis were consistent with acute inflammation, demonstrating a polyclonal increase in

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immunoglobulins and presence of acute phase reactants.

A biopsy of the lesions was consistent with hypersensitivity vasculitis, the presence of neutrophils, eosinophils and lymphocytes being typical of leukocytoclastic angiitis. Immunopathologic studies showed no deposits of immunoglobulins and complement components within the lesions.

The patient was treated with prednisone 60 mg/day and after two days this was decreased by 5 mg/day. Her fever and systemic symptoms, including the arthralgias and myalgias, disappeared in two days and the rash five days after starting corticosteroid therapy. The dose of prednisone was tapered gradually over a two-week period and the patient has not had other symptoms referable to this incident. Her sedimentation rate reverted to normal.

Discussion

This case describes the onset of a systemic vascular illness eight days after immunization with trivalent influenza vaccine and pneumococcal vaccine. The patient had no previous history of immunologic events and was a relatively healthy 71-year-old woman with no underlying viral or bacterial infection which could account for the reaction. No other medications or underlying systemic rheumatic disease could be implicated in this case and as the review of the literature shows, these reactions are exceedingly rare. Two reports of a similar nature have been found in searching the English language literature. In one, a 55-year-old woman appears to have had reactivation of the vasculitis after a subsequent influenza vaccination[6] and in the other, influenza vaccine appears to have triggered a biopsy-proved vasculitis without underlying cause from another agent.[7]

This case differs from the others in that the patient had previously been vaccinated with split-product virus types on more than one occasion and indeed had received the same influenza virus antigens the year before. The concomitant administration of pneumococcal vaccine may have been the trigger that precipitated this patient's arteritis since the addition of this antigen was the only possible factor that differed from her vaccination in years past. Sensitization by prior administration of influenza vaccine cannot be ruled out. The increasing practice of simultaneous administration of these products perhaps may lead to more frequent incidence of unusual side effects. This report points out one of the more potentially serious systemic side effects which may be seen.

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Hypopituitarism associated with systemic amyloidosis

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Involvement of the pituitary gland in systemic amyloidosis is infrequently reported; only two patients with both pituitary amyloidosis and hypopituitarism have been described.[1–4] In 1951, marked amyloid infiltration of the pituitary was described in one patient who one year earlier had had an amyloid goiter associated with normal values for 24-hour thyroid ^{131}I uptake and basal metabolic rate.[5] The patient had reported loss of pubic and axillary hair and impotence for approximately two years. In 1961, Feinberg and Harlan[6] described a patient with multiple myeloma who had clinical hypopituitarism. This patient had marked replacement of pituitary tissue by amyloid. We have recently studied a patient with systemic amyloidosis and hypopituitarism. At autopsy, the pituitary was markedly infiltrated with amyloid.

Case Report

A 40-year-old man, an editor, was last admitted to Montefiore Hospital in October 1980. Crohn's disease had been diagnosed in 1958 after disclosure of a rectal fistula. His subsequent clinical course was punctuated by occasional exacerbations of ileitis that responded to corticosteroids followed by prolonged remissions. In 1963, a side-to-side anastomosis of the distal ileum to the transverse colon was performed, and, in 1975, the blind loop was partially resected. During the latter hospitalization, his bladder ruptured spontaneously; amyloid was found in the bladder wall and on rectal biopsy specimen. Further study indicated that amyloid infiltration was present in the esophagus, stomach, ileum, colon, spleen, bone marrow, and kidneys. Bence-Jones protein and M components were absent. In 1977, his thyroid gland enlarged rapidly without pain but he remained euthyroid. Further thyroid enlargement resulted in mild dysphagia that required resection of the thyroid isthmus in 1978; the specimen showed diffuse replacement of the thyroid by amyloid. Renal function deteriorated precipitously in April 1979. Serum thyroxin (T_4) was 5.8 μg/dL (normal 4.5 to 11.0) at that time. Hemodialysis was started in May 1979. He then developed mild clinical hypothyroidism and hypogonadism and was started on levothyroxine (L-T_4), 25 μg daily. In August 1979, serum T_4 was 3.3 μg/dL and serum thyroid-stimulating hormone (TSH) was 14.7 μU/mL (normal <5.0). The L-T_4 dose was in-

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creased to 50 μg daily. One month later, serum T_4 was 1.8 μg/dL, and the L-T_4 dose was further increased to 75 μg daily. Other endocrine data obtained at that time revealed the following: serum growth hormone (GH) was 6.7 ng/mL, (normal <10); serum prolactin was 26.4 ng/mL (normal <26); serum testosterone was 248 ng/dL (normal 300 to 1,200); serum lutenizing hormone (LH) was 13.5 mIU/mL (normal 7 to 24); serum follicle-stimulating hormone (FSH) was 3.7 mIU/mL (normal 4 to 25). Morning and evening plasma cortisol measurements were recorded as “normal.”

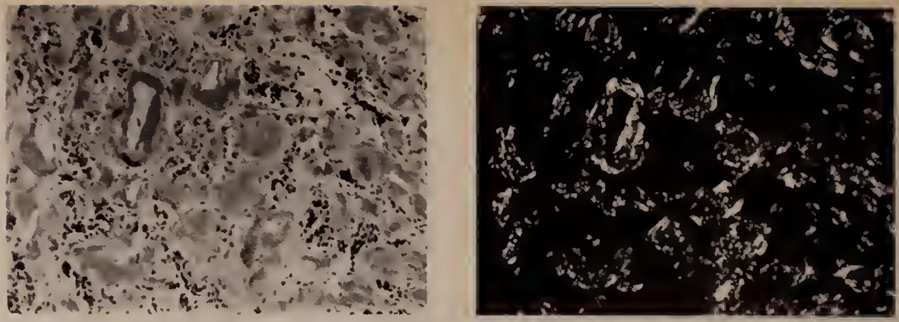

FIGURE 1. (Left) Section of anterior pituitary demonstrating diffuse parenchymal and perivascular infiltration by amyloid. (Right) Same section viewed under polarized light shows positive birefringence. (Congo red stain, original magnification × 100)

During the next year, the L-T_4 dose was progressively increased but the serum T_4 concentration remained depressed. The patient was hospitalized again in July 1980 for herpes zoster, myelopathy, and severe clinical hypothyroidism. At that time, he was receiving 425 μg L-T_4 and 125 μg liothyronine (T_3) daily. Serum T_4 was 1.8 and 1.5 μg/dL, resin T_3 uptake was 34.2% (normal 25 to 35), free T_4 index was 2.2 and 1.8 (normal 5 to 12), serum T_3 was not detectable (normal 90 to 180 ng/dL), and serum-free T_4 by equilibrium dialysis was 0.8 ng/dL (normal 1.0 to 2.3). Serum TSH was <0.6 μU/mL. Serum TSH increased to only 2.5 μU/mL both at 25 and 60 minutes after intravenous injection of thyrotropin-releasing hormone (TRH)—500 μg, protirelin (Thypinone). Antithyroglobulin and antimicrosomal antibodies were not detectable. Parenteral L-T_4 treatment was started.

In September 1980, the patient was rehospitalized for treatment of malignant otitis externa. Physical examination revealed a decrease in pubic and axillary hair. The testes were also decreased in size and had become soft. Serum GH concentration was 18 ng/mL and was 15, 23, 19, and 16 ng/mL at 30, 60, 90, and 120 minutes after administration of levodopa (500 mg). Serum prolactin was 33.6 ng/mL. Serum testosterone was 76 ng/mL and serum FSH was 16.5 mIU/mL. Serum LH was 4.2 and 5.4 mIU/mL at 0 and 30 minutes after intravenous (IV) injection of 150 μg LH-releasing hormone (RH). Synthetic adrenocorticotropic hormone (ACTH), 250 μg IV (Cotrosyn) was administered. Plasma cortisol increased from a baseline of 10.6 μg/dL to 20.8 after 30 and 60 minutes. Serum total protein and albumin were within the normal range during the entire hospital course. The sella turcica was not enlarged on skull roentgenograms.

The patient expired suddenly in October 1980 after he had developed ascites, ataxic gait, myoclonus, and recurrent seizures. Pathologic diagnoses included: (1) amyloidosis involving the thyroid gland, parathyroid glands, lungs, heart, entire gastrointestinal tract, kidneys, bladder, prostate, skin, liver, spleen, pancreas, adrenal glands, testes, soft tissue, bone marrow, choroid plexus, and anterior pituitary (Fig 1), (2) hemosiderosis of the liver, spleen, and peritoneum, and (3) noncaseating granulomas of liver and spleen.

Discussion

This patient demonstrated three unusual endocrine features during the course of his disease. First, he developed hypothyroidism with an amyloid goiter; this has been reported infrequently.[7,8] Second, he remained hypothyroid during administration of large oral doses of thyroid hormone, and only became euthyroid after administration of parenteral L-T_4. A similar observation was made in a patient reported by Feinberg and Harlan.[6] Thus, it is likely that both of these patients had decreased absorption of thyroid hormones. Third, the patient had clinical and laboratory evidence of pituitary dysfunction associated with the presence of diffuse amyloid infiltration of the pituitary gland.

The initial development of hypothyroidism was noted after enlargement of the thyroid gland was well established. In contrast, none of 30 cases of amyloid goiter reviewed in 1961 had evidence of hypothyroidism although thyroidectomy revealed amyloid infiltration.[7] In another series, all seven cases of amyloid infiltration of the thyroid that were reviewed were considered euthyroid.[8] The continued presence of hypothyroidism despite treatment with large doses of thyroid hormones also suggested malabsorption of the thyroid hormones.

Pituitary dysfunction in our patient was initially suggested by the findings of normal serum TSH concentration in the presence of hypothyroidism and decreased serum total and free thyroid hormones. Marked blunting of the TSH response to administered TRH in the presence of very low serum T_4, free T_4, and undetectable T_3 further supported abnormal TSH regulation in this patient. Additional evaluation indicated a decrease in serum testosterone that was associated with serum FSH and LH concentrations that were in the normal range. In the absence of pituitary dysfunction, an increase in serum concentration of the gonadotropins would be anticipated in a patient with primary deficiency of testosterone secretion. The blunted LH response to injected LH-RH further supported impaired pituitary LH secretion in this patient. Serum GH, prolactin, and plasma cortisol response to injected ACTH appeared within the normal range. These considerations suggested that infiltration of the pituitary gland with amyloid might result in decreased secretion of TSH and the gonadotropins. This clinical judgement was subsequently verified by the autopsy findings.

Some of these findings such as the marked decrease in serum testosterone concentration might be caused by chronic renal failure in this patient. However, since serum LH concentration is generally increased in patients with chronic renal failure,[9] the finding of a normal serum LH suggests that factors other than chronic renal failure prevailed in our patient. This view is supported by the absence of a significant LH response to LH-RH and the markedly blunted TSH response to TRH since published reports suggest that uremic patients have a normal LH response to LH-RH[10-12] and, in patients treated with chronic hemodialysis, the TSH response to TRH may be slightly blunted, normal, or even increased.[13-15] These considerations suggest that chronic renal failure may have contributed only to a small degree to the anterior pituitary deficiency of our patient.

Amyloidosis of the pituitary appears to be an infrequent occurrence in systemic amyloidosis. Two autopsy series, together describing 98 cases, record three patients with pituitary involvement.[1,2] Pituitary amyloidosis has also been reported incidentally in two other cases with systemic amyloidosis.[3] In the absence of systemic amyloidosis, only three cases among 2,550 consecutive autopsies were reported to have pituitary amyloidosis.[4] Clinical information concerning pituitary function is lacking in all of these reports. Aside from the case reported here, only two patients with systemic amyloidosis with probable pituitary involvement and dysfunction have been recorded. One patient with primary amyloidosis had probable hypogonadism.[5] The other patient had multiple myeloma and was treated for hypogonadism, hypothyroidism, and hypoadrenocorticism.[6] It is our impression that the current ease and precision of endocrine testing techniques may now define further unsuspected cases of pituitary dysfunction in patients with systemic amyloidosis. Improved management of those conditions that are associated with systemic amyloidosis may also result in an increased incidence of hypopituitarism from this cause.

Acknowledgment. The authors are indebted to Julius G. Parker, MD, for enabling us to study this patient. We also thank Imaharu Nakano, MD, for the histochemical studies, Chao Pan for measurements of serum T_3 and TSH, Uzi Weinberg, MD, for supplying LH-RH and Mrs. Lorraine White for preparing the manuscript.

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Multiple drug toxicity

Overt and subtle signs in ventricular tachycardia

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Symptomatic ventricular tachycardia (VT) requires constant and intensive antiarrhythmic drug therapy. Unfortunately, most drug regimens are associated with major and minor adverse reactions, some quite disabling to the patient. These can include subtle mental changes which may interfere with intellectual capacity. This impairment may only become apparent after discharge and return to work.

CASE REPORT

A 16-year-old previously healthy boy collapsed suddenly; cardiopulmonary resuscitation was performed and VT was documented. The physical examination disclosed nothing remarkable after vital signs were regained. The electrocardiogram revealed sinus rhythm with first-degree atrioventricular (AV) block and right axis deviation, but no other significant abnormalities; cardiac catheterization revealed no abnormalities. Electrophysiologic testing revealed prolonged distal conduction time—His-ventricular (H-V = 67 ms). VT was easily inducible with programmed electrical stimulation. Initial therapy with conventional antiarrhythmic drugs was not successful in preventing recurrent episodes of symptomatic VT, resulting in repeated hospitalizations and external electrical cardioversions. It was subsequently determined that a combination of 150 mg of aprindine hydrochloride, 280 mg of propranolol hydrochloride, and 450 mg of phenytoin, all in divided daily doses, seemed to control the symptomatic VT. (The blood levels were: aprindine 1.49 μg, propranolol 523 μg, and phenytoin 14 μg per milliliter, all within therapeutic ranges.) The patient was discharged and initially experienced no major difficulties other than slight ataxia, lethargy, and tremor when playing golf. However, his academic performance deteriorated and threatened his ability to be competitive for college entrance. Because of the change in his scholastic performance, he was electively readmitted to determine if this represented hypoxic brain damage or reversible drug-induced changes.

Psychologic testing was undertaken to evaluate his mental status objectively. Tasks requiring perceptual discrimination and motor control were poorly

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This work was supported in part by a research grant from the Christian A. Johnson Endeavor Foundation, USPHS Grant RR 0035 for the support of a General Clinical Research Center and RR 00722 for the support of an outpatient General Clinical Research Center.

handled, which suggested intracranial damage or medication effect, or both. An investigational agent, encainide (Mead Johnson)* was administered, although a high dose (400 mg/day) was required to maintain sinus rhythm.

Ten weeks after the initiation of treatment with encainide, the patient was readmitted to the hospital with complaints of nausea, vomiting, and abdominal tenderness. Prior to these new complaints, he had been free of symptomatic arrhythmia. The physical examination disclosed scleral icterus and a tender, enlarged liver. Liver function test (LFT) findings were markedly abnormal; however, there was no evidence of infection or other hepatotoxin. With further deterioration, encainide was discontinued. Although not definitely established, the temporal relationship between the institution of the drug, the onset of symptoms, the absence of other risk factors for hepatitis, and the rapid progression of the disease process made the diagnosis of drug-induced hepatitis a strong possibility. Liver biopsy was not performed at this time due to the elevation of the prothrombin time. Two days after discontinuing encainide, the nausea and vomiting ceased and improvement was noted in the LFTs which completely returned to normal within 14 days. Reinstitution of propranolol, aprindine, and phenytoin was required for satisfactory although not optimal control of the VT.

At this time the patient underwent implantation of an automatic internal defibrillator to protect him against life-threatening ventricular arrhythmias while a new drug regimen was instituted.[1] Amiodarone* was added with a loading dose of 1,000 mg daily for two weeks and continued with a 400-mg daily maintenance dose. Consideration was then given to the withdrawal of the three potential central nervous system (CNS) depressants. Since propranolol and aprindine were most effective in rhythm control, phenytoin was the first to be discontinued. He was discharged on a daily regimen of 400 mg of amiodarone, 40 mg of aprindine, and 120 mg of propranolol. From the original regimen, these doses represented substitution of amiodarone for phenytoin, a 73% reduction in aprindine, and a 57% reduction in propranolol. He has done well on the new regimen for the past 12 months without symptomatic VT.

Psychologic testing was repeated. The performance subtests showed a significant improvement and reflected more awareness of multiple details and speed of performance. The findings were similar to his group-standardized ability observed prior to medication. The overall impression predicted that the patient should be able to compete academically again, and initial school grades seem to substantiate this.

DISCUSSION

This case highlights the injurious nature of the underlying disease process as well as that of the therapy. Although the VT was refractory to conventional (quinidine, procainamide, disopyramide phosphate, and lidocaine hydrochloride) as well as investigational (tocainide) drugs, it was partially but symptomatically controlled by the empiric combination of aprindine,[2-6] propranolol, and phenytoin. Nevertheless, this therapeutic success was obtained at the expense of intellectual function, which only became apparent when the patient returned to school.

Aprindine, propranolol, or phenytoin alone may impair mental function. Although the major adverse effects of aprindine are tremor, nervousness, and ataxia, it is common for patients to relate that instant recall appears delayed and the performance of mental calculations is no longer as easily accomplished; the pathophysiology of this effect is not well understood. Propranolol may cause mental depression, fatigue, confusion, ataxia, hallucinations, vivid dreams, and an acute organic brain syndrome,[7,8] presumably due to effects on CNS adrenergic receptors. Phenytoin has been associated with choreoathetosis, ataxia, and cerebellar degeneration, as well as with a variety of mental and behavioral changes (hyperactivity, silliness, confusion, slurring of speech, dullness, and drowsiness).[9] The order in which signs of phenytoin intoxication appear is nystagmus, ataxia, and mental disturbance.[10] They are frequently associated with high blood levels (20 to 40 μg per milliliter). Drowsiness and behavior disturbances are the most common mental alterations.

In this patient, test score improvement after the withdrawal of phenytoin and reduction in dosage of aprindine and propranolol, implicates these drugs as the prime offenders in this patient's decline in academic function. This reachievement of previous group standing excluded hypoxic or other brain damage. Since all three drugs have CNS effects, it is difficult to single out any one to account for one patient's impairment; in fact, it may have been the combination of all three that was responsible. If one wished to speculate, phenytoin and propranolol would be most suspect. The hepatitis subsequent to the treatment with encainide could not be associated with the administration of any of the other drugs he had been taking.[11-13] Hepatic toxicity has not previously been reported with encainide although one prior case of elevated transaminase was noted but not felt to be drug related.[14]

Although many patients may return to employment after a diagnosis of serious cardiac disease, the mental dysfunction associated with drugs may still interfere with activities of daily living as well as with the ability to take medications correctly. When the regimen involves multiple drugs, it may be difficult to distinguish cause and effect. Familiarity with pharmacology and careful attention to gross and subtle clinical signs are key in successful management.

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* At the time this patient was treated, blood level assays for encainide and amiodarone were not available.

Primary giant *Candida* lung abscess

Response to miconazole

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Candida albicans is not an aggressive organism. Consequently, candidiasis seldom occurs in patients who do not have underlying diseases such as diabetes or leukemia which lower general or local host resistance to infection or who have not received a recent course of therapy with broad-spectrum antibiotics, corticosteroids, or immunosuppressants.[1] Lung abscess due to *C albicans* is a rare entity, even in patients with predisposing conditions,[2,3] and a search of the literature failed to reveal any instances of pulmonary candidiasis in healthy individuals. The only report found was one case of esophageal candidiasis which progressed to fistula formation and lung abscess.[4] We report an unusual case of primary *C albicans* lung abscess in an otherwise healthy individual.

CASE REPORT

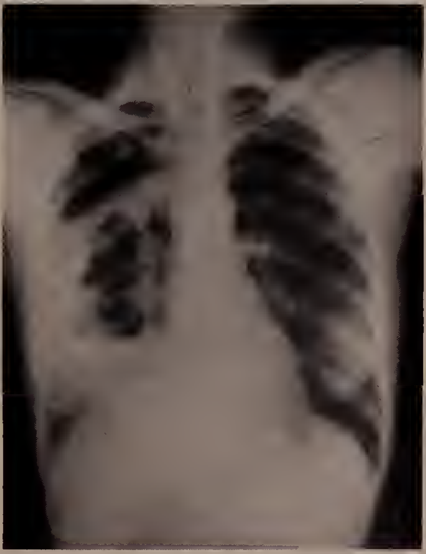
A 40-year-old woman was hospitalized for treatment of progressive fever, increasing nonproductive cough, right-sided pleuritic pain, constant epigastric aching, and mild, nonbloody diarrhea of 10 to 12 days' duration. The patient's history preceding onset of this illness was unremarkable.

Physical examination revealed a prostrate, apprehensive, depressed patient with a fever of 104.8°F. Vital signs were normal. There was no evidence of oral or vaginal monilia. Moderate epigastric tenderness was present with no enlargement of abdominal organs. The right hemithorax contained a large area of tubular breathing in the paravertebral midlung posteriorly, with decreased breath sounds and many coarse rhonchi throughout the remainder of the lower right lung. The left lung was normal.

Laboratory studies were within normal limits with the following exceptions: hematocrit, 38.7%; sedimentation rate, 89 mm/h; total leukocytes 21.3×10^3/cu mm with a marked shift to the left; serum cholesterol, 80 mg/dL; serum calcium, 8.2 g/dL; serum albumin, 3.5 g/dL. VDRL and tuberculin skin tests (PPD) were negative.

Chest x-ray revealed a lesion compatible with a giant lung abscess in the lower right lobe measuring 15 × 8 × 8 cm (Fig 1). Walls of the cavity were thick and shaggy, and fluid filled the lower quarter of the cavity. X-ray films of the remainder of the right lung and the entire left lung were normal. Findings were confirmed by lung tomography. No sputum was available for bacterial cultures; saliva obtained on admission yielded normal oral flora. A catheterized urine specimen and multiple blood cultures were negative.

Treatment was initiated empirically with cefazolin, 500 mg given intravenously every six hours; parenteral fluids; and oral imipramine. Postural drainage was performed sporadically. The patient's condition worsened. On day 6 cefazolin was discontinued and penicillin G was administered intravenously in a dosage of 5 million units every 12 hours.



Chest x-ray (posteroanterior view) on hospital day 1. Note giant, partially fluid-filled lung abscess in right lower lobe measuring 15 × 8 × 8 cm. The other four pulmonary lobes are normal.

Candida albicans was isolated from sputum on day 7. Bronchoscopy on day 8 revealed that the right lower lobe bronchus was partially stenosed and was exuding a greenish mucoid pus. Pus obtained by bronchoscopic aspiration and by direct percutaneous needle aspiration of the abscess yielded pure cultures of *C albicans*. Multiple biopsy specimens from the right lower lobe and the abscess wall contained nonspecific necrotic material and evidence suggesting acute inflammation.

Chest x-ray film on day 10 showed widespread, blotchy infiltrates in all five pulmonary lobes which were not present in a chest x-ray film obtained on day 8. Tomography showed some of these infiltrates to be new, small lung abscesses, possibly the result of spillage of *Candida*-laden pus from the right lower lobe abscess.

The patient's condition deteriorated rapidly; however, surgery was refused. By day 11, a diagnosis of *C albicans* lung abscess seemed likely. Therapy with miconazole, 200 mg given intravenously every six hours, was begun; penicillin G was continued to prevent secondary bacterial pneumonia. Progressive improvement ensued with complete defervescence by day 21. Chest x-ray film and lung tomogram on day 63 showed the giant lung abscess to be one-half its original size; small abscesses and signs of bronchopneumonia had disappeared. On day 68, miconazole and penicillin G were discontinued and the patient discharged. Chest film and lung tomogram six months after admission were normal.

COMMENT

The difficulties in establishing a diagnosis of candidiasis are well known and in many cases antifungal therapy is initiated on the basis of presumptive evidence.[1] In this patient a definitive diagnosis was hampered by lack of sputum for pretreatment culture, lack of any positive cultures until a sputum specimen obtained on day 7 yielded *C albicans*, and the absence of any predisposing factors. Nevertheless, we feel that the diagnosis of a primary *C albicans* lung

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abscess was firmly established on the basis of other evidence suggesting a fungal infection rather than a mixed-flora abscess. First, it is highly unlikely that a six-day course of cefazolin and two days' treatment with penicillin G would have eradicated all bacteria from such a large, pus-filled abscess and simultaneously allowed massive overgrowth of *C albicans* such as that found in specimens obtained by bronchoscopic and transthoracic aspiration on day 8. Overgrowth of this magnitude is generally associated with prolonged treatment with broad-spectrum antibiotics. Second, the clinical picture in this case was consistent with a fungal infection: clinical and radiologic features in this patient were suggestive of a fungal infection, the patient's condition continued to deteriorate despite antibiotic therapy, and the response to antifungal therapy with miconazole was dramatic.

In the absence of microbiologic studies, one can only speculate that the unusual pathogenicity of *C albicans* in this patient may have been the result of increased virulence of the organism since host defense mechanisms were intact. The excellent response of this serious infection to the new, relatively nontoxic antifungal agent, miconazole, is reassuring.

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Lung carcinoma presenting as a breast tumor

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Breast cancer is the most common malignant condition in women. However, not all breast cancers originate within the breast. Metastatic solid tumors to the breast comprise 0.3% to 0.8% of breast cancers.[1-3] Correct diagnosis of these cases is important because chemotherapy is often the treatment of choice and radical or modified radical mastectomy is usually unnecessary.

We describe a case of lung cancer presenting as a breast tumor and briefly review the literature. Several clinical clues are emphasized in the diagnosis of metastatic disease to the breast.

CASE REPORT

A 54-year-old woman first went to her surgical consultant in December, 1981 with a chief complaint of a mass in the right breast. Three months previously she noticed a small swelling on the surface of the right breast. Her family physician advised warm compresses which were applied for two weeks without improvement. Antibiotics were then prescribed and two weeks later she was referred to her gynecologist for evaluation. The diagnosis of abscess of the right breast was confirmed. Treatment of soaks and antibiotics was continued. After eight weeks of this therapy, the lump became more demarcated and gave no evidence of fluctuation or resolution. She was then referred for surgical consultation.

Examination revealed a mobile, rock-hard, tender 3 × 3-cm nodule in the upper-outer quadrant of the right breast. The right axilla, left breast, and left axilla were unremarkable. Because of the apparent skin involvement overlying the nodule, the impression was of inflammatory carcinoma of the breast.

The patient was admitted to Brookdale Hospital Medical Center for preliminary work-up and excisional biopsy of the mass. Routine preoperative chest x-ray revealed a nodule in the right middle lobe. Excisional biopsy of the right breast mass revealed a poorly differentiated mucin-producing adenocarcinoma with a predominant clear cell pattern. A primary carcinoma of either the kidney or lung was suspected. Results of an intravenous pyelogram were negative. An upper gastrointestinal series and barium enema were also unremarkable. Bronchoscopy revealed a mucin-positive clear cell adenocarcinoma of the right middle lobe with histologic features identical to that of the breast mass.

The final diagnosis was clear cell carcinoma of the right lung with metastasis to the right breast. The patient died six months after the initial visit.

COMMENT

Metastatic disease is responsible for 0.3% to 0.8% of solid tumors of the breast and may be the presenting lesion in one quarter to one half of the cases. Solid tumors metastatic to the breast were the presenting lesion in 3 of 7 cases reported by Sandison (1 small cell carcinoma of lung, 1 gastric carcinoma, 1 renal cell carcinoma),[1] in 10 of 35 cases reported by Hadju and Urban (5 small cell carcinomas of lung, 1 non-small cell carcinoma of lung, 2 malignant melanomas, 1 ovarian carcinoma, and 1 sarcoma),[2]; and in 7 of 29 cases reported by McIntosh et al (3 small cell carcinomas of lung, 1 non-small cell carcinoma of lung, 2 ovarian carcinomas, and 1 endometrical carcinoma).[3]

Metastatic disease involving the breast is usually a well-defined, rounded lesion, firm in consistency. These features are maintained even when the lesion is large and rapidly growing. Reports of skin dimpling, peau d'orange, and Paget's disease of the breast are lacking. Axillary nodes have been clinically involved only when the matastatic tumor was in the axillary tail of the breast. Xeroradiography demonstrates round lesions with sharply demarcated borders contrasting with the typical irregular outlines of most breast carcinomas.[3]

Metastatic tumor to the breast is rare

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but if recognized early may spare the patient major surgery. We would like to emphasize three points. First, women with breast lesions should always have complete history and physical examination including chest x-ray prior to surgery. Second, women with large breast masses with well-defined borders and lacking evidence of axillary involvement, skin dimpling, or peau d'orange should be suspected of having metastatic tumor to the breast. If a primary tumor is not apparent prior to excisional biopsy, it may be advisable not to base radical surgery on a frozen-section diagnosis but to await a definitive pathology report. Lastly, women with breast lesions and known malignant disease elsewhere should be considered to have metastatic disease until a second primary cancer (breast) is documented. Excisional biopsy of the breast mass with comparison of the pathology to that of the known primary cancer may spare the patient more radical and possibly unnecessary surgery.

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FROM THE LIBRARY

A WONDERFUL FEAT AND A REMARKABLE COMMENT

The following is an editorial which appeared in a New York daily paper. From a medico-scientific standpoint it is interesting; from a medico-economic standpoint it is worthy of remark.

> To-day Edward Payson Weston, sixty-nine years old, completed his walk from Portland, Maine, to Chicago. He left Portland October 29, so that the trip consumed less than a month. He averaged nearly fifty miles a day, covered a total of more than 1,200 miles, walked ninety-five miles in one day, and repeatedly tired out horses that were being driven beside him. He traveled the same road forty years ago, but the last journey was made in better time than the first in spite of the old pedestrian's increased age.
>
> Weston is the finest example in the world of the athlete who never "goes stale." Prize fighters have been held up to our admiration for years as models of physical perfection; yet we doubt if there ever was a prize fighter who at sixty-nine could have endured a physical strain at all comparable to that through which Weston has triumphantly passed. There is no secret about the veteran's method. He did not train especially for his task. He had no need to train, for he has never in his long life been out of training. He has continued his diet to wholesome food, lived as much as possible in the open air, kept his nerves steady and his muscles hard by reasonable exercise, and never once "applied hot and rebellious liquors" to his blood.
>
> There will be few or none seeking to emulate Weston's achievement. Pedestrianism as a profession or a "stunt" has gone out of fashion. But the old man's fine example as an exponent of the life of simple diet and fresh air ought to make a peculiar and effective appeal to millions who now pin their faith to drugs and to doctors.

The remarkable feature of this editorial is the implication that healthful, wholesome living is not related to the medical profession so much as drugs are. We take no umbrage at this inference concerning our profession, for it too truly expresses the judgment which the public places upon us. We are esteemed as having a greater knowledge of drugs than of how to maintain the human body in health. But such an expression as this should cause some introspection, for, while we may have a very excellent opinion of ourselves, our usefulness as an economic factor in the community is much hampered by the public judgment of our interests and capabilities.

—*NY State J Med* 1908; 8:31.

FRESH AIR

Fresh air, properly speaking, is not a therapeutic agent in the treatment of consumption, nor is atmosphere a therapeutic agent in the treatment of coal-damp poisoning, nor is depriving a maniac of a loaded revolver a therapeutic measure. These things consist in restoring natural and healthful conditions as nearly as possible. Breathing fresh air improves the health and resistance of any one who is habitually without it, and that means pretty nearly everybody. Fresh air increases the resistance of those with consumption. It also does the same for those without consumption and for those with other diseases, chief among which is that great symptom-complex from which most of us suffer and which, for want of a better name, we will call stuffyness, due to the breathing of vitiated air. To advise continuous fresh air for the consumptive alone is hardly fair to those who are still doing their full day's work without complaint—they need it too. Let us not neglect them while they are yet not consumptives.

—*NY State J Med* 1908; 8:31

THE IMPAIRED PHYSICIAN

Edited by Stephen C. Scheiber, MD, and Brian B. Doyle, MD. 211 pages. New York, Plenum Medical Book Company, 1983. $24.50.

It is conservatively estimated that the incidence of drug addiction in American physicians is thirty to one hundred times the incidence of drug addiction in the general population. One in every hundred to four hundred physicians will become addicted to drugs. Of these, 9% commit suicide. Suicide in male physicians is about 15% above the rate for men in the general population. For women physicians, the suicide rate is three to four times higher than for American women in general. For pychiatrists, the suicide rate is two times that of the general population. The Amerian Medical Association estimates further that 7–8% of American doctors are now, or will become, alcoholics.

These problems, together with the high prevalence of troubled marriages, and depression in physicians and their wives, have demanded the attention of medicine at every level of organization: the hospital staff, local, state and national medical societies, local and national psychiatric societies, medical schools and state boards of medical examiners and professional licensure.

Stephen Scheiber and Brian Doyle, both members of the Association for Academic Psychiatry, and both concerned with medical education, have selected for this volume 13 papers that had been presented over the past five years at local or national meetings of the American Psychiatric Association or of the Association of American Medical Colleges. They have grouped these papers into five categories: nature and extent of the problem, the medical school and the impaired physician, prevention and treatment, special problems in treating physicians and the responsibility of organized medicine. The editors have added a fourteenth paper and a sixth section, "conclusions and recommendations." This concluding chapter and the preface together offer an overall summary of the problem and may be read profitably before delving into the specifics of each chapter.

As with most collections of papers culled from diverse meetings, the chapters are unevenly written and there is unavoidable redundancy. The book, however, makes the following valid points:

1. Drug addiction, alcoholism, depression, and adjustment problems of physicians are significant in terms of sheer numbers of psychiatrically impaired physicians, and in terms of impact on the physicians' families and patients.
2. Women physicians and psychiatrists are significantly over-represented in suicide.
3. The responsibility for identification and care of the "impaired physician" rests with every physician and with every level of medical organization; Local and state programs that insure confidentiality are already available in each state (an appendix prepared by Emanuel Steindler of the Department of Mental Health, Division of Scientific Affairs of the American Medical Association, lists the state programs, together with the names and addresses of contact people in each state) that provide appropriate help.
4. Generally, there is extreme resistance of a physician to acknowledge his own psychological difficulty and conversely there is still reluctance on the part of his colleagues to attempt to direct the psychiatrically ill physician to help.
5. Awareness of the problem should begin in medical schools with,
    (a) greater attempts to screen out applicants with personality disorders that may predispose to later emotional decompensation (this of course implies a knowledge of prediction which, except in the case of gross psychiatric illness, we do not yet have);
    (b) provision of support groups and role models for medical students, particularly for female students, and in the transition from pre-clinical to clinical years;
    (c) ready availability of confidential psychiatric assistance.
6. The residency years are particularly difficult for female physicians and for married residents in general. Here again support groups including families are suggested.
7. Education of physicians concerning alcoholism, drug addiction and depression should continue beyond the basic training years including CME courses in various formats.
8. Treatment for the "impaired physician" is still, as is any psychotherapy, an individual problem. But special issues such as confidentiality, the tendency of doctors to deny problems in themselves and to avoid treatment, the need for physicians to be treated as special patients, and conversely, the hesitation of the treating psychiatrist to treat colleagues as his best judgement may dictate, may all interfere with optimal treatment and must be considered in the plan of management.
9. The physician's family should be involved in management, possibly in family group therapy, as support for the physician and as support for the family itself.
10. There are many unanswered questions; in epidemiology, in etiology, in development of valid predictive instruments, in solutions to practical problems of identification and therapy, in the mobilization of the medical community to identify, treat and support their colleagues.

There is an additional factor implied but not spelled out in this volume. With 10% of American doctors whose functioning at some time is influenced by drugs or by alcohol, what happens to their patients at such times? What errors are made at such times? The tragedy of the impaired physician thus is more than a tragedy to himself and his family. This book is a step at educating us all, confronting us with the problem, challenging us to find solutions. Each of us must become our brother's keeper, lest, by our default, the police power of the state is invoked to protect patients and medicine itself from the "impaired physician."

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THE KIDNEY AND BODY FLUIDS IN HEALTH AND DISEASE

Edited by Saulo Klahr, MD. 593 pp., illustrated. New York, Plenum Medical Book Company, 1983. $59.50.

This book, dealing with something considered a "dense subject," is well written and easy to read, and its seven sections dovetail smoothly. Basic concepts of renal physiology and pathophysiology evolve clearly and progressively keeping always in touch with clinical situations, adding sufficient experimental information to maintain the reader's interest in a well balanced text. Doctor Klahr and his associates ought to be congratulated for their achievement which constitutes an asset for those involved in managing patients with renal problems, whether at the level of medical student, general medicine or pediatric, fellow, or nephrologist.

To quote Doctor Klahr's preface, the book "was designed as a text . . . which deals with the most common problems in nephrology, providing a new insight into how to improve clinical skills." Doctor Klahr and associates set out to write a useful, uncomplicated yet comprehensive, evaluation of renal physiology and pathophysiology, attempting to supply sufficient background in these disciplines to handle complicated clinical problems in a more rational fashion. It is the opinion of this reviewer that they succeeded in presenting a clear and profound analysis of these subjects. The information is there; it is up to the reader to grasp it and use it properly.

Off hand, one may be tempted to say that this is one more book on a subject already studied in detail in many previous authoritative volumes. It is the opinion of this reviewer, however, that this is not the case. The book by Doctor Klahr and associates has the outstanding advantage of incorporating a large, but well organized mass of theoretical renal physiologic and pathophysiologic information; it interprets the information and correlates it with practical clinical facts. The extensive experience of dealing with clinical problems and the struggle to unite both theory and practice lead to a much clearer understanding of the patient's disease. Without demeaning the merits of previous texts on the subject, the intangible and difficult to define charisma of good teaching that is found in this review seldom appears in others. I believe the authors are doing a real service to students of renal diseases, transmitting their personal experience in such a clear and didactic fashion. I wholeheartedly recommend this book to those interested in the field of nephrology.

This reviewer is pleased to see that a distinguished pediatric nephrologist, Dr. Alan Robson, has contributed two important chapters to the book. Most of the basic review papers, text books, and pertinent experimental data have been included in the cited literature. Perhaps in future editions the book may benefit by including a more extensive list of references to help those who may desire to delve deeper into the mechanisms or specific aspects of particular problems.

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HOME HEALTH CARE: HOME BIRTHING TO HOSPICE CARE

By Allen D. Spiegel, PhD., MPH. 697 pp. Owing Mills, MD, National Health Publishing, 1983. $52.00

Home health care now appears to be the fastest growing segment of the health care industry. Between 1969 and 1980, Medicare home health visits rose at an *annual* compound rate of 9.2 percent and payments for such visits at a rate of 21.4 percent. Between 1973 and 1979, Medicaid home health recipients rose at an annual compound rate of 19.7 percent and payments 39 percent. These growth rates must be viewed in perspective. Even in 1980, home health services accounted for only 1.4 percent of all Medicaid vendor payments and 2 percent of Medicare payments. Moreover, 77 percent of all Medicaid home health payments went to one state—New York. Nevertheless, the dramatic growth rates and the encouragement now being given by government and by several of our most prestigious private foundations to home health care as a cheaper and frequently more appropriate "alternative" to hospital and nursing home care, suggest that the subject has to be taken seriously—at least in New York State.

But what, exactly, is home health care? How does the average physician relate to it? Is the physician part of the "home health team" or not? Dr. Spiegel's huge (700 pages) new book attempts to provide health professionals with a popularly written introduction to this new/old and multi-faceted modality, and a guide to its seemingly endless ramifications.

Much of the apparent confusion of home health care arises out of its complex history. Hospital-based programs can be traced back to 1796 when the Boston Dispensary established a home care program primarily as a way to train resident physicians. However, a century and a half passed before the next major hospital-based experiments, this time by Montefiore and St. Vincent's in New York City. Even then there was little emulation until the current hospital financial crunch made all types of outpatient care appear more attractive.

Meanwhile, the field was largely taken over by public health and visiting nurses. Then, beginning in the 1950s, home nursing agencies began to augment their services with home health aides/homemakers, a new and still controversial paraprofessional category that is at least partially legitimized by Medicare and Medicaid.

Finally, an entirely new ingredient has been added—the technologically—oriented, for-profit home health enterprise. Home Health Care of America, a California-based national organization that specializes in parenteral feeding of post-hospitalization patients, reportedly increased its revenues from $1 million in 1981 to $40 million in the past year. A consulting firm has projected a $16 billion market for this type of home care by 1990.

Dr. Spiegel does not even try to reduce these disparate elements into any simple formula. The chapter headings indicate the scope of the material covered:

Who Needs Homecare?
Diseases/Conditions Suitable for Homecare.
Homecare—What's it All About?
Homecare, Long-term Care, and the Elderly.
How is Homecare Financed?
Is Homecare Less Costly?
Is Cheaper Better?
A Scoreboard for the Homecare Team.
Homecare as Growth Industry: Nutured or Starved?
Evaluation in Homecare.
Where is Homecare Going? Trends and Issues.

The reader will not find many answers to the various provocative questions and issues. Dr. Spiegel makes clear at the outset that he does not think there are any clear-cut answers at this time. Some sophisticated readers will be disappointed at the paucity of rigorous policy analysis. But probably for the majority of his intended audience—practitioners—this shortcoming will be more than balanced by the wealth of interesting descriptive material, which should help to turn many home health novices into enthusiasts, if not experts. Within its own modest goals, this is a useful volume.

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THE ANATOMY OF ART: PROBLEMS IN THE DESCRIPTION AND EVALUATION OF WORKS OF ART

By Thomasine Kimbrough Kushner. 181 pp. St. Louis, Warren H. Green, Inc., 1983. $22.50

The author dissects the anatomy of art by exposing the problems involved, and by skillfully and knowledgeably proposing a clear, logical, solution. She comments on the confusion caused by art critics who have knowledge of only a specific field, and a lack of understanding of each others' specialized vocabulary. To develop a solution, the author attempts to evolve a language that is common to all the fields of art.

She dissects the arts of music, poetry, and painting, and lays their components bare. However, she accepts only those elements that fit into her scheme of common usage for the three arts.

She investigates a number of primary elements. For example, she points out that rhythm is readily sensed in music and poetry. Its counterpart in painting is the use of variations in light and dark, or variations in contour and shape. In painting, the counterpart to pitch is hue (color).

The primary elements of a particular art form are developed into themes and variations, which are further developed into the total poem, painting, or musical composition.

Kushner's description of the physics of sound and sight is brief and graphic. The illustrations describing the musical thematic variations are more complex, and, as with the other arts, require the reader to be more knowledgeable on each topic in order to comprehend it fully. The development of the entire theory is very complex, but is methodically and meticulously pursued. Opposing theories and statements by aestheticians, philosophers, historians, artists, critics and others are considered, but eliminated by the author's semantics, philosophy, and judgment.

Kushner discusses Wittgenstein's theory of art from "Philosophical Investigations." She disputes Weitz's suggestion in "Problems in Aesthetics" that the term "art" should be an open concept, since new art forms and new movements constantly arise. The author prefers boundaries to be set in order to have an effective procedure for dealing with the relationship of aesthetics to criticism.

In setting these boundaries, which will help to differentiate art, she refers to Walter Sutton's, "Modern American Criticism," when asking if aesthetic value is fundamentally concerned with the structure of a work of art, or the message contained in that work.

Although the author reviews important implications of the "message concept," she believes that only the "structural" approach is the esthetic theory that will be most consistent, adequate, comprehensive, economical, and elegant (author's criteria).

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COMMON SKIN DISORDERS: A PHYSICIAN'S ILLUSTRATED MANUAL WITH PATIENT INSTRUCTION SHEETS

By Ernst Epstein, MD. Second edition, 263 pp., illustrated. Oradell, NJ, Medical Economics Books, 1983. $25.95

This volume provides very useful and practical information on the diagnosis and management of some common skin problems. It is written primarily for non-dermatologists. In addition to advice on diagnosis and management it contains patient instruction sheets that the author has found helpful in his practice of dermatology.

Dr. Epstein made his selections of common skin disorders, perhaps more according to his interests than on the basis of what is most common. Is alopecia arcata more common than male pattern alopecia? Are dermatofibromas more common than skin tags? Is nickel allergy more important to the non-dermatologist than drug eruptions? At times there is a tendency toward oversimplification to an extent that is not necessarily conducive to good medical practice. An example is the chapter on diagnosing dermatitis.

However, the author's basic attempt to provide the non-dermatologist with practical information is fulfilled, since the volume provides much more detailed instructions on how to use the proposed treatments than do most other texts written for non-dermatologists or dermatologists.

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INFECTIVE ENDOCARDITIS AND OTHER INTRAVASCULAR INFECTION

By L. R. Freedman, MD. 243 pp. illustrated, New York, London, Plenum Medical Book Company, 1982. $35.00.

Dr. L. R. Freedman's monograph, part of a series on current topics in infectious diseases, is a useful addition to the literature on infectious endocarditis. It is compact and contains a full current bibliography.

Aside from a pedestrian introduction, the text crisply presents the basic information needed for therapy and prophylaxis. The broad, clinical spectrum of endocarditis is emphasized in the context of both the clinical characteristics observed during today's era of relatively rapid diagnosis and of newly described infectious agents.

I find questionable, however, the statements that 25 percent of patients with infective endocarditis do not have heart murmurs, and that 25 to 30 percent are afebrile. Also, the author does not include a discussion of the evidence or lack of evidence for the benefits of antibiotics in preventing infectious endocarditis. Moreover, there are no illustrations of appropriate M-mode and 2-D echocardiograms. More detail on technical considerations in the surgery of endocarditis and intraoperative and immediate postoperative management would also have been helpful.

Despite these omissions, however, the information it presents to the practicing physician makes this a text of considerable value.

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ATLAS OF SURGICAL OPERATIONS

By Robert M. Zollinger, MD and Robert M. Zollinger, Jr., MD. Fifth edition. 437 pp., illustrated. New York, Macmillan Publishing Company, 1983. $80.00.

It is indeed a pleasure to review this new edition of Zollinger's Atlas of Surgical Operations. Surgeons now approaching the latter part of their professional career were brought up on the first edition by Cutler and Zollinger, and the new generation now has the opportunity to utilize this very handsome work by Dr. Zollinger and his son. The senior author is the retired chief of Surgery at Ohio State University and needs no introduction to the surgical community, where he has been a leader for the past thirty years. This new edition bears all the hallmarks of the same outstanding craftsmanship that characterized the prior editions. The Macmillan Company deserves credit for the production of this edition, the book is very handsomely made and the material presented in a readable form. The illustrations are clear and well presented attesting to good cowork between the surgeon and the artist. Of course, it is impossible to illustrate every surgical procedure in use, and each surgeon has a favorite method that may not be the one chosen for this book. Still, I miss a description of a sphincteroplasty of the ampulla of Vater, and I would have preferred a description of a cholecystectomy from the fundus down, with prior isolation of the cystic duct, instead of the retrograde removal used here. I am very pleased to see emphasis on anchoring the jejeunal loop to the diaphragm in total gastrectomy, although I would prefer to use end to end anastomosis to the one described. The Whipple procedure should be done by removing gallbladder and common duct in one piece with the specimen, and I think the pancreato-jejeunal anastomosis should always come first in reconstruction in order to avoid a combined biliary pancreatic fistula if a breakdown of pancreas anastomosis (the most common complication) occurs. The Nissen fundoplication is well illustrated with the left gastric vessels left intact for support of the wrap. It probably is not necessary to close the esophageal hiatus with the Nissen repair and the wrap should be quite lose around the size 40 bougie. The chapter on common duct repairs might have included the use of transhepatic U-tubes that are so helpful in managing recurrent bile duct strictures and allow easy replacement and cleansing without any operative procedures.

These comments should not be construed as criticisms since there is no way to please everybody.

The Atlas can be recommended without hesitation to the surgeon in training who needs an easily available step by step description of a proposed procedure and will also be valuable to the practicing surgeon to embark on one of the more rare major procedures so well illustrated here.

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OUTLINE GUIDE TO ANTIMICROBIAL THERAPY

By John E. McGowan, MD. 188 pp. Oradell, NJ, Medical Economics, 1982. $14.95.

This short manual is an accurate, well-organized resume of Dr. McGowan's approach to treating infections. I doubt that it offers something not available in other manuals, such as the *Pediatric Manual* of Dr. J. Nelson, or *The Medical Letter Handbook on Antimicrobial Agents*. Nevertheless, some readers may find the volume an acceptable alternative to other up-to-date references.

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MANAGING OB/GYN EMERGENCIES

Second edition. Edited by John T. Queenan, MD, Oradell, NJ, Medical Economics Books, 1983. Illustrated, 290 pages. Hardcover, $29.50.

Throw-away magazines supported by the pharmaceutical industry overwhelm the mail of the practicing physician. One of the most successful of these journals is "Contemporary OB/GYN," edited by John T. Queenan, Professor of Obstetrics and Gynecology and Chairman of Georgetown University School of Medicine, Washington, D.C. "Contemporary OB/GYN" is honeycombed with huge advertisements supported by as many as fifty of the drug industrial giants. The material used for these medical articles includes primary the practical aspects of the specialty. Rarely are included articles from the new special scientific areas. However, the material is brought down to the level of the hurried obstetrician, so that while awaiting a delivery, if he finishes reading the New York Times, he will with gusto pick up "Contemporary OB/GYN."

Queenan has taken 32 different subjects presented primarily in his throw-away magazine and skillfully woven them into a composite book with as many authors which is entitled *Managing OB/GYN Emergencies*, 2nd Edition. The subject matter deals with 32 titles having to do with complications in the specialty by authors selected from a wide variety of medical schools. The emergencies comprise primarily obstetrical problems (22), gynecological problems (8), and those related to anesthesia (2). Standard use for this book is limited to the resident or medical student who may wish to brush up on a special problem when a specific complication has reached the delivery room or operating floor. For the medical student who requires a confluent text book for understanding the various aspects of the specialty or for the board qualified obstetrician who wishes to evaluate a problem in depth, other texts are preferred.

Because of the great variety of authors with different backgrounds and degrees of experience, the chapters vary in completeness and in accuracy. This book has the failing of any book in a fast progressing area. The written word may be 12 to 18 months from initial writing to publication.

For example, paracervical block is no longer used on our service because of the danger of severe fetal bardycardia and occasional injections made into the fetus. This chapter should be deleted. The section on ectopic pregnancy is extremely abbreviated. Three lines explain the so-called variable diagnostic value of pregnancy tests. The quantitative serum beta, monoclonal, or receptorassays for HCG in the management and diagnosis of ectopic pregnancy is omitted. If any of these tests are performed by a good laboratory and the titers are below 5–10 MIU/ml, ectopic pregnancy may be virtually ruled out. In addition, multiple tests that show leveling off of the hCG value are suggestive of ectopic if sonography and/or curettage rule out intrauterine gestation.

Instead of describing a chapter under the complication of premature labor, the term "preterm cervical dilation" is preferred. Dilatation may be of little significance to as high as 2 cm if it is unaccompanied by effacement. The presence of effacement may be more significant than dilation; the author did not detail this important consideration. Most of the toxicity from B adrenergic agonists has been failure to recognize heart disease or permitting drug dose to produce maternal tachycardia above 140 or over 160 with poor maternal pulse rate and blood pressure monitoring. The use of these agents with multiple pregnancies and ruptured membranes has been shown to be ineffective. The incompleteness in many of these chapters is demonstrated in one entitled "Genital Tract Birth Trauma." The lacerations of the perineum commonly found are described from one to four in their degree of trauma. However, there is no description of how to avoid involvement of the sphincter or rectal mucosa. More important, no information is presented to demonstrate surgical techniques of repair to prevent sphincter incontinence or rectovaginal fistula. Many of the chapters demonstrate methods of management with arrow charts. Although this provides immediate direction and clarity to the next clinical method of therapy, alternate judgments and free exchange of ideas require continued encouragement.

Two recent books discussing many of the same clinical problems, *Complications in Obstetrics and Gynecology* by Schaefer, G. and Graber, E. A. and *Controversy in Obstetrics and Gynecology* by Zuspan, F. P. and Christian, C. D. provide information for management at greater depths and permit alternate opinions to surface even though the editors may disagree. *Managing OB/GYN Emergencies* edited by John T. Queenan has limited use on the active obstetrical service for the medical student and resident to obtain initial insight into well-recognized complications. Many of the chapters selected from "Contemporary OB/GYN" require far greater completeness to be included as a teaching reference in *Managing OB/GYN Emergencies.*

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MAGIC SHOTS (A HUMAN AND SCIENTIFIC ACCOUNT OF THE LONG AND CONTINUING STRUGGLE TO ERADICATE INFECTIOUS DISEASES BY VACCINATION)

By Allan Chase. 576 pp. New York, William Morrow and Company, Inc., 1982. $19.95.

Written for the lay reader in a straightforward, unassuming manner, *Magic Shots* recounts the triumphant, and at times tragic, story of vaccine development against infectious diseases. Mr. Chase's fascinating account is based on an accurate and detailed historical framework that represents hundreds of hours of diligent research. After pointing out the preventive and cost effective advantages of vaccination, the author meticulously dissects the small pox story. His anecdotal style not only freshens an otherwise dull vignette from medical history, but also poignantly reminds the reader how politics, economics and social status interact in the medical conquest of a disease. In the next three chapters, Mr. Chase traces the development of the germ theory from its Roman roots, through its medieval to preindustrial barbaric interpretations, and its culmination in the hands of Clark, Pasteur, Semmelweis, Menchnikov, Ehrlich and Lister. The epic battles against cholera, anthrax and rabies are colorfully discussed from the scientific, methodologic viewpoint as well as from an epidemiologic and sociocultural perspective. Subsequent chapters detail the heroic detective work that went into the design and implementation of the diphtheria, polio, pneumococcal, influenza, measles, mumps and rubella vaccines.

The most recent newcomer on the inoculations scene, hepatitis B vaccine, is also included in the text. Mr. Chase consistently expands his theme along the lines of Mirsky's Law—the culmulative acquisition of scientific knowledge. His presentation is far from impersonal; he artistically recreates the temper of the times and the forces that molded many of these discoveries. For instance, he draws on the work of Ivanovski, Beijerinck, and the tobacco mosaic disease in order to set the stage for Reid's discovery of filterable viruses; a fascinating interlude of the family's musical interest of Avery and Heidelburger are provided as a backdrop to their work in immunochemistry and their research on the pneumococcal vaccines; Sir John Snow's explanation of cholera transmission in his investigations of the Broad Street pump are reviewed; and the first treatment of rabies by Pasteur with a boy by the name of Joseph Meister before the vaccine had been tested is entertainingly described. Most of us, no doubt, associate William Gorgas with the Panama Canal and malaria and yellow fever eradication. Yet, Mr. Chase profiles Gorgas as a man who was also very concerned about the overcrowded, unsanitary conditions present in the Canal Zone. Much of the efforts made by Gorgas and his wife were directed at "the captain of the men of death" (pneumonia) and its relationship to unhygenic conditions and poverty. The remaining chapters of the book deal with the new vaccine research endeavors and outstanding socio-economic issues affecting vaccine implementation: gonorrhea, the common cold, herpes, and certain forms of cancer.

The author's basic tenet is that vaccines can be designed for the majority of infectious agents. Unfortunately, only a dozen or so vaccines have been successfully developed since the time of Jenner. Many potentially good vaccines have been delayed temporarily or permanently by a variety of economic and political events: diphtheria toxoid by World War I, and gonorrhea vaccine research by Nazi Germany. Chase also points out that a vaccine that is not used is useless. He states that over 33% of America's infants and young children are not immunized against those diseases for which there is a reliable vaccine, a statistic which is not referenced.

The book does more than provide an entertaining account of the medical minutiae surrounding the development of today's office vaccines. It takes one step further. It raises the level of consciousness of the reader by sinking him into the morass of mundane factors that surround any scientific endeavor. It is not common knowledge that diphtheria toxoid was significantly delayed by World War I—a fact that resulted in over 30,000 deaths mostly in children under six. As another example, the author claims that the final global eradication of smallpox (May, 1980) occurred not so much from altruistic concerns but rather from the basic interest of the super-powers to consolidate their economic supremacy. Although there is some truth to the statement in the text, lack of supporting data and references are a potential drawback. There is no question in this reviewer's mind however, that the cost-benefit factor for vaccines is the bottom line. There's no medical or moral justification for withholding any available, inexpensive, preventive treatment (vaccination) against a prevalent disease that has a large degree or morbidity and significant mortality.

In summary, Mr. Chase has done an excellent job in accurately synthesizing a myriad of historical details along a clear understandable continuum. This story is at once entertaining and provocative; the reader can review medical history from a fresh perspective while at the same time walk away uneasy about the course and priorities of preventive medicine. I highly recommend this book to all lay and professional people who enjoy historical trivia and desire to gain a deeper understanding of our society's priorities of health care.

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TUBERCULOSIS AND ITS PREVENTION

By Stefan Grzybowski, MD 114 pp, illustrated. St. Louis, Warren H. Green, Inc., 1983. Hardcover, $19.95.

This small book (114 pages) is a largely personal appraisal of tuberculosis by one of the most experienced physicians in the field. Dr. Grzybowski's 40 years of experience were pursued with vigor, imagination and honesty. His contributions to the literature include numerous clinical and epidemiologic studies. His first book, "Tuberculosis in Childhood and Adolescence" in 1954 (with Bentley and Benjamin) remains a classic.

This book is intended for general physicians in both the developed and developing countries. While the presentation of each aspect of the infection and resultant disease is brief, each is eminently more readable than textbook chapters on the subject.

Dr. Grzybowski gives a clear description of the natural history of tuberculous infection in man, starting with the initial infection, the common dormant period, and the factors that may lead to late development of disease. He has included the usual pulmonary manifestations, miliary spread, extrapulmonary lesions, and modern concepts of therapy. Considerable stress is laid upon prevention and the roles of the tuberculin skin test and preventive therapy. The discussion of the role of BCG vaccination is particularly clear.

For the taste of this reviewer the book is *too* brief. I feel that each section should have given more of the observations of such an experienced physician and author. However, my younger associates praised the book for its brevity and readability, greatly preferring it over textbook chapters and longer works. From this, I would have to conclude that Dr. Grzybowski achieved his goal of writing for physicians who are not specialists in the field but would like an authoritative but brief source for the current understanding of tuberculosis.

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BOOKS RECEIVED

BASIC SCIENCES

Current Topics in Chinese Science: An annual selection of articles from the two leading general science journals in China. (Science in China and Science Bulletin. Series. Vol. 1, sec. D.) 430 pp., illustrated. New York, Gordon and Breach Science Publishers, 1982. $22.00 (softcover).

Chemistry of Natural Products: The Proceedings of Sino-American Symposium on Chemistry of Natural Products. Edited by Wang Yu. 321 pp., New York, Gordon and Breach Science Publishers, Inc., 1982. $77.00 (hardcover).

BIOSTATISTICS

Biostatisics in Clinical Medicine. By Joseph A. Ingelfinger, MD, Frederick Mosteller, PhD, Laurence A. Thibodeau, PhD, and James H. Ware, PhD. 316 pp., illustrated. New York, Macmillan Publishing Company, Inc. $24.95 (softcover).

DERMATOLOGY

Common Skin Disorders. A Physician's Illustrated Manual with Patient Instruction Sheets. Second edition. By Ernest Epstein, MD. 167 pp., illustrated. Oradell, NJ, Medical Economics Books, 1983. $25.95 (softcover).

GENETICS

Discovering DNA: Meditations on genetics and a history of the science. By N. A. Tiley. 288 pp., illustrated. New York, Van Nostrand Reinhold Company, 1983. $16.95 (hardcover).

INTERNAL MEDICINE

Clinical Gastroenterology. Third edition. By Howard M. Spiro, MD. 1549 pp., illustrated. New York, Macmillan Publishing Company, Inc., 1983. $88.00 (hardcover).

Dr. Mandell's Lifetime Arthritis Relief System. By Marshall Mandell, MD. 271 pp. New York, Coward-McCann, Inc., 1983. $13.95 (hardcover).

Rheumatology: A primary care approach. By Bruce M. Rothschild, MD. 416 pp., illustrated. New York, Yorke Medical Books, 1982. $39.50 (hardcover).

PEDIATRICS

The Developmentally Disabled Child. A manual for primary physicians. By Doman K. Keele, MD. 287 pp., illustrated. Oradell, NJ, Medical Economics Books, 1983. $19.95 (hardcover).

The First Month of Life. A Parent's Guide to Care of the Newborn. Second edition. By Glenn R. Stoutt, Jr, MD. 177 pp. $9.95 (softcover).

Talking With Your Child About Sex. By Mary S. Calderone, MD, and James W. Ramey, EdD. 133 pp. New York, Random House, 1982. $14.95 (hardcover).

PSYCHIATRY

Comprehensive Group Psychotherapy. Edited by Harold I. Kaplan, MD and Benjamin J. Sadock, MD. 375 pp., illustrated. Baltimore, MD, Williams & Wilkins, 1983. $35.00 (hardcover).

The Impaired Physician. Edited by Stephen C. Schreiber, MD and Brian B, Doyle, MD. 211 pp. New York, Plenum Medical Book Company, 1983. $24.50 (hardcover).

Modern Synopsis of Comprehensive Textbook of Psychiatry III: Study guide and self-examination review. By Harold I. Kaplan, MD and Benjamin J. Sadock, MD. 383 pp. Baltimore, MD, Williams & Wilkins, 1983. $21.95 (softcover).

The Pathogenesis of Alcoholism—Psychosocial Factors. (The Biology of Alcoholism, volume 6.) Edited by Benjamin Kissin and Henri Begleiter. 695 pp., illustrated. New York, Plenum Press, 1983. $69.50 (hardcover).

The Suicidal Patient: Recognition, intervention, management. By Victor M. Victoroff, MD. 255 pp. Oradell, NJ, Medical Economics Books, 1983. $24.50 (hardcover).

MISCELLANEOUS

Thought: A Review of Culture and Idea. Vol 57, no. 227. Contributors James Gaffney, Patrick Derr, Andrew Varga, Stephen Rowntree, Gilbert Meilaender, John J. Paris, Edmund N. Santurri, William Werpehowski, Daniel Maguire and Richard J. Regan. 115 pp. New York, Fordham University Quarterly, 1982. $5.00 (softcover).

Toma Tells It Straight—With Love. By David Toma and Irv Levey. 210 pp., illustrated. New York, Harper & Row, Inc., 1981. $12.95 (hardcover).

REFERENCE

Medical Abbreviations Handbook. Second edition. 193 pp. Oradell, NJ, Medical Economics Books, 1983. $7.95 (softcover).

NEWS BRIEFS

Legislation

The following two bills, which MSSNY had opposed, were passed by the New York State Legislature in 1983 and signed into law by Governor Mario Cuomo:

Use of X-Rays by Chiropractors; Chapter 450 (A3337-B:S2588-B). The law eliminates both the prohibition of the use of x-rays by chiropractors on patients under 18 years of age, and the restriction that the use of x-rays by chiropractors be confined to the area of the body above the first lumbar vertebra.

Optometrists Allowed to Prescribe Medicines; Chapter 451 (A6813:S5022). The law allows optometrists to administer drugs topically onto the surface of the eye for diagnostic purposes. Other health-care legislation passed this year and signed by Governor Cuomo included the following:

AIDS Emergency Care. New York City general hospitals may not refuse emergency medical care to persons suffering from Acquired Immune Deficiency Syndrome; nor may medical personnel obstruct treatment of, or refuse to treat an AIDS victim. Another law establishes an AIDS Research Council and temporary State commission to study AIDS, financed by a $5.25 million grant.

HMOs. Medicaid patients enrolled in Health Maintenance Organizations (HMOs) may maintain their eligibility for government-funded health care for six months after enrollment.

Auto Insurance for the Disabled. Insurers may not automatically put a handicapped driver in a special "risk" category only on the basis of the disability.

Minors, Alcohol, and Automobiles. Driver education courses must have at least one hour of instruction on the effects of alcohol and drugs. Another law allows a person who is injured by a minor who was drunk while driving to sue both the minor and the person who provided the minor with alcohol.

Education for the Retarded. The State is now required to establish a process to assess the needs of retarded students in community residences when they reach 18 years of age, which is three years before they stop being eligible for state funding.

Appealing Insanity Pleas. Prosecutors may appeal when a defendant is found "not responsible" due to mental disease.

Standardized Medicare Reimbursements

A new Medicare reimbursement plan will make flat-rate reimbursements to the nation's 6,000 acute care hospitals. The plan is designed to standardize reimbursements and reduce costs to Medicare. The rates will be based on 1981 average treatment costs for Medicare patients, adjusted for inflation. Hospitals will not be reimbursed for patient care costs above the amount set for each of 467 specific illnesses and procedures, which are called "diagnosis related groups" or DRGs. According to the Department of Health and Human Services, the fees paid to hospitals will take into account the differences between hospital costs in rural and urban areas. As an incentive for efficiency, hospitals able to provide care for less than the fixed rates will be able to keep the difference.

This new "prospective payment" program, passed by Congress as part of the Social Security bailout bill, will be phased in over three years, beginning October 1, 1983. The Congressional Budget Office has estimated that the new system will buy only about a year's time before a financing crisis hits the Medicare trust fund. In the event of a crisis, the Medicare program will not be able to pay its bills on time, starting about the year 1990. Last year, Medicare spending reached $50.9 billion.

For further information, contact the following Department of Health and Human Services office:

Health Care Financing Administration
Division of Financial Operations
Reimbursement Assistance Branch
26 Federal Plaza
Room 38-130
New York, NY 10278

Amendment Would Allow Registering of Female Doctors and Nurses for Draft

The Department of Defense has been working for more than a year on an amendment to the Selective Service Act that would authorize President Reagan to order female health care professionals to register for the draft and be classified.

Captain Sheri Stetson-Mannix, a Pentagon spokesperson, told the Journal that the proposed amendment is not developed enough to be called "legislation" at this point.

"It's a concept that's only in the developmental stage," she said. Captain Stetson-Mannix added that there was still no target date for completion of the proposed amendment. She said, however, that the Defense Department has already determined it would need to add 8,000 physicians and 23,000 nurses to its forces during a complete mobilization.

The proposed amendment would not empower President Reagan to draft female health care professionals; separate legislation would be needed for that step.

NEWS BRIEFS and *NEWS FEATURES* are compiled and written by Marc Kusinitz, PhD.

NYJ NEWS FEATURES

Physician-led groups tackle the problem of antibiotic misuse

Overprescribing of antibiotics has existed for decades, and for decades there have been physicians and researchers who criticized this practice. In November 1981, some of those critics established an international organization called the Alliance for the Prudent Use of Antibiotics (APUA). APUA is a forum for educating physicians about the dangers of excessive use of antibiotics and for offering solutions to the problem. It has 200 dues-paying members and 500 corresponding members in about 50 countries. The organization's first president, Stuart Levy, MD, of Tufts University School of Medicine, is also one of the founders. In an interview with NYJ News Features, Dr Levy suggested the main reason for the problem of antibiotic misuse: "It's too easy to write a prescription."

NYJ News Features

This issue marks the debut of NYJ News Features, a section that is intended to broaden the Journal's coverage of issues such as politics, public health, ethics, research, trends in medical practice and aspects of the non-medical sciences.

NYJ News Features will be compiled and edited by Marc Kusinitz. After earning a PhD in biology at New York University, he worked as a research scientist at both the Pharmacology Department of NYU Medical Center and the Department of Anesthesiology at the Medical and Dental Center of New Jersey. Dr. Kusinitz spent three years as assistant, then associate editor of Scholastic *Science World* magazine.

The *New York State Journal of Medicine* encourages and appreciates all comments and suggestions concerning NYJ News Features.

Editor

The founding of APUA was a response to the concerns of physicians and scientists aired at a meeting convened in 1981 in the Dominican Republic by physicians and researchers to discuss the ecology and pathogenicity of bacterial plasmids. Both plasmids and chromosomes of many bacteria now carry genes for drug resistance. For years there have been warnings that the misuse of antibiotics was spawning resistant strains of pathogenic organisms, adding to health care costs. Documentation of antibiotic misuse goes back at least as far as the late 1940s. A 1949 report in the *Journal of the American Medical Association* (1949; 140:1324–1328) discussed the failure of a continuous prophylactic regimen of penicillin for people susceptible to respiratory diseases.

A year later, Maxwell Finland, MD and his co-workers at Boston City Hospital demonstrated a marked increase in the penicillin-resistant strains of pathogenic staphylococci isolated during 1948 and 1949, as compared with those isolated before 1946 (*Am J Clin Path* 1950; 325–334). Finland also warned of the dangers of misuse of antibiotics, citing, for example, the interference of chloramphenicol with the efficacy of penicillin's action on enterococci strains *in vitro* and *in vivo* (*Bull NY Acad Med* 1951; 27:199–220).

Thus, three decades ago, Finland could state bluntly: "With the introduction of increasing numbers of agents having varying activities, the number of combinations and permutations becomes appalling."

Finland warned against the temptation to use several different agents against those infections that do not respond satisfactorily to a single agent, that are caused by several types of organisms, or that are caused by unidentified organisms. The result of such practices, he pointed out, was excessive prescribing of antibiotics that served little or no function:

> In many hospitals, even in some of the better teaching institutions where the use of most of the agents is under some measure of intelligent control, it has been estimated that less than 10 percent of the amounts of antibiotics administered is indicated for the optimum curative effect of susceptible infections, even after liberal dosages are allowed for infections in which there are well established indications.

Despite such warnings, it was not until 1958 that the Committee within Hospitals of the American Hospital Association (AHA) would recommend that hospital infection committees "make rigorous efforts to reduce to the minimum consistent with adequate patient care . . . use of antibiotics, especially as prophylaxis in clean, elective surgery." (*Hospitals* 1958; 32:49).

All the AHA could do, however, was recommend. About ten years later a published report of antibiotic use in seven community hospitals disclosed that a total of 62% of all patients receiving antibiotics did not have definite evidence of infection (*JAMA* 1970; 213:264–267).

The need to reverse this situation prompted Calvin M. Kunin, MD, and his colleagues at the University of Virginia to suggest a form of peer review:

> Ideally, the use of antibiotics, particularly in hospitals, would be improved by advice from specialists in an infectious

> disease group and support from an effective diagnostic bacteriology facility (*Ann Int Med* 1973; 79:555-560).

Boston City Hospital, under the leadership of the Infection Control Committee and Pharmacy Committee, had already responded to the problem by putting certain systemic antimicrobial agents on a "restricted list," on a trial basis. (The list was updated and instituted on a permanent basis in July 1982.)

Under this system, a physician must notify a member of the Infectious Diseases Unit and discuss the reasons for prescribing a particular antibiotic. The consultant then notifies the pharmacy to make the drug available. The prescribing physician may accept alternative suggestions or recommendations, but is not required to.

A study by Finland and John McGowan, MD, showed that the amounts and classes of antibiotics used in 1972 differed considerably between Boston City Hospital and hospitals that did not employ a restraint system (*South Med J* 1976; 69:193-195). For example, cephalosporin antibiotics represented only 10.3% of the money spent on antibiotics at Boston City Hospital, compared to 58.1% at a similar hospital in another city.

The authors also pointed out that the average amount of ampicillin used at Boston City Hospital during four years of unrestricted use was 6.8 times greater than during the previous three years, when its use was restricted.

A BILLION DOLLAR BETA?

The recent introduction of "third-generation" cephalosporins further complicates the problem of antibiotic misuse. Cephalosporins in general have a broader spectrum of activity than penicillins and are less susceptible to degradation by the beta-lactamase enzymes of resistant organisms. These antibiotics represent about 35% of all antibiotic use, with annual sales worldwide of about $1 billion (*Science* 1981; 214:1225-1228). Such spending represents another aspect to the antibiotic problem: the soaring costs to patients and third-party payers.

If the past is any indication of the future, more money will be spent on unneeded antibiotics than when the first warnings were sounded decades ago.

Yet, the blizzard of advertising claims helps to make economical prescribing of drugs a demanding task. However, Dr. Kunin, has suggested a rational approach to sorting out the options, both generic and brand name (*N Engl J Med* 1969; 280:1442-1446):

> . . . it would be extremely helpful to the practicing physician if every drug advertisement was required, by voluntary action of medical journals and other media, to indicate the average price of the drug to the pharmacist on the basis of small and large purchases of the preparation, of regional differences and of the cost per day of the recommended doses . . . . Visibility of drug pricing would permit the physician to weigh cost advantage with claims made for the wide variety of single agents and combinations offered to him.

"It's too easy to write a prescription."

Although such an advertising campaign seems unlikely today, the Royal Melbourne Hospital, a 700-bed teaching hospital of the University of Melbourne, in Victoria, Australia, has taken a sophisticated approach to solving both the medical and financial aspects of the antibiotic problem.

In 1978, all physicians at the Royal Melbourne received copies of the first edition of *Antibiotic Guidelines*, a digest of treatment protocols for various infections. The handbook, published by the Standing Committee on Infection Control of the Health Commission of Victoria, has been adapted for use in hospitals throughout Australia.

Before the Guidelines booklet was distributed and twice afterwards, surveys of antibiotic use at Royal Melbourne were completed (*Med J Aust* 1983; 2: 217-221). In the survey done in February 1978, before the introduction of the booklet, 48% of the antibiotic treatments were inappropriate when compared with the recommendations of the booklet. The second survey disclosed that the level of inappropriate treatment fell to 28% eight months after the booklet was introduced. The final survey, done four years after the booklet was introduced (and now in its third edition), showed that 30% of treatments were still inappropriate. In addition, the surveys found a particular problem in the case of amoxicillin.

AN ADVERTISING TWIST

In an effort to reinforce the lessons of *Antibiotics Guidelines*, the hospital's Pharmaceutical Advisory Committee took a cue from the advertising techniques of the pharmaceutical industry. The committee decided to promote the idea of prudent antibiotic use to physicians by means of an eye-catching advertising campaign. It hired the Melbourne office of Scali, McCabe and Sloves, an advertising agency headquartered in New York, to help it persuade doctors to avoid prescribing broad-spectrum antibiotics in cases where narrow-spectrum drugs would be as effective. The ultimate goals of the campaign were to slow the emergence of multiply resistant bacteria and to reduce the cost of treatment by encouraging judicious use of antibiotics.

In a joint decision earlier this year, Scali and the Royal Melbourne centered the campaign on one drug, amoxicillin, which the hospital was then purchasing from Beecham Research Laboratories, headquartered in the United Kingdom. The three-month campaign, which started in June of this year, had two immediate aims, according to Assistant Microbiologist Ken Harvey, FRCPA, at Royal Melbourne and a member of the Antibiotic Guidelines Sub-Committee (which prepared *Antibiotic Guidelines*) of the Health Commission's Standing Committee on Infection Control. The first aim was to allow Royal Melbourne to evaluate the effectiveness of advertising as an educational strategy, using amoxicillin as a test case. The other aim was to encourage physicians to use the Guidelines booklet. There was to be an initial evaluation of the campaign's results in September, with a follow-up evaluation in February 1984, to see if changes in prescribing habits survive the change of house staff that occurs at the end of the year.

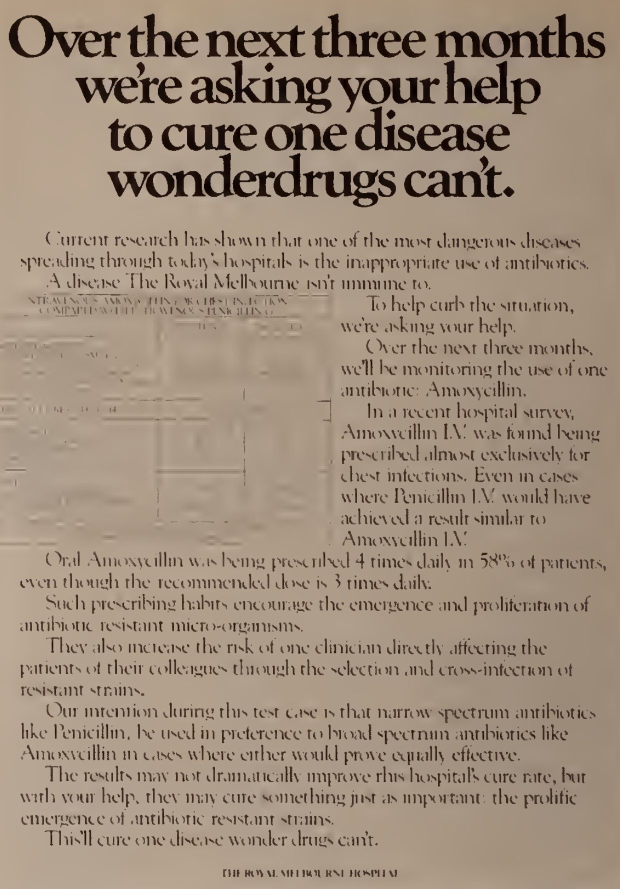
In an interview with the *Journal*, Geoffrey Godkin, a representative of Scali, McCabe and Sloves, emphasized that the campaign was not directed against pharmaceutical companies. Rather, it was designed to educate physicians on the problems of antibiotic misuse through the use of sophisticated marketing techniques.

The most obvious marketing tool being used is the campaign slogan that appears on some of the strategically placed posters in the Royal Melbourne, as well as on complementary pens and prescription pads distributed to the physicians: "It'll cure one disease that wonder drugs can't." The disease referred to is the proliferation of resistant

> *". . . We are living in the presence of a time bomb."*

organisms in Australian hospitals. Physicians are aware of the problem because of wide-ranging coverage in *The Medical Journal of Australia*, including the entire issue of May 29, 1982.

One poster states that a recent survey showed that intravenous amoxicillin was being prescribed almost exclusively for chest infections, even when penicillin would have been as effective. Moreover, 58% of patients receiving oral amoxicillin were given prescriptions for four times daily, even though the recommended dose is three times daily. The poster urges physicians to use narrow-spectrum antibiotics like penicillin instead of broad-spectrum antibiotics like amoxicillin in cases where these drugs are equally effective. The poster tabulates the advantages of prescribing penicillin over amoxicillin, fewer side effects and a big saving in cost ($8.12 for an average course of penicillin per patient versus $49.00 for amoxicillin).



Over the next three months we're asking your help to cure one disease wonderdrugs can't.

Current research has shown that one of the most dangerous diseases spreading through today's hospitals is the inappropriate use of antibiotics.

A disease The Royal Melbourne isn't immune to.

To help curb the situation, we're asking your help.

Over the next three months, we'll be monitoring the use of one antibiotic: Amoxycillin.

In a recent hospital survey, Amoxycillin I.V. was found being prescribed almost exclusively for chest infections. Even in cases where Penicillin I.V. would have achieved a result similar to Amoxycillin I.V.

Oral Amoxycillin was being prescribed 4 times daily in 58% of patients, even though the recommended dose is 3 times daily.

Such prescribing habits encourage the emergence and proliferation of antibiotic resistant micro-organisms.

They also increase the risk of one clinician directly affecting the patients of their colleagues through the selection and cross-infection of resistant strains.

Our intention during this test case is that narrow spectrum antibiotics like Penicillin, be used in preference to broad spectrum antibiotics like Amoxycillin in cases where either would prove equally effective.

The results may not dramatically improve this hospital's cure rate, but with your help, they may cure something just as important: the prolific emergence of antibiotic resistant strains.

This'll cure one disease wonder drugs can't.

THE ROYAL MELBOURNE HOSPITAL

Posters, R_x pads, and pens all carried the campaign's message.

UNDERMINING PRESCRIBING HABITS

Beecham objected to the campaign's concentration on amoxicillin. The company also objected to a sentence in the article Harvey and his coauthors had submitted to *The Medical Journal of Australia* detailing the results of their antibiotic audits and the effect of the booklet on prescribing habits. The sentence was part of the discussion of the reasons for the continuing problems at the Royal Melbourne with antibiotic use, despite the use of *Antibiotics Guidelines*. In addition to stating that senior medical staff often appeared too busy to supervise antibiotic use, and that bulletins, memoranda, and lectures were infrequent and lacked impact, the authors laid some of the blame elsewhere: "Furthermore, powerful marketing techniques used by the pharmaceutical industry often undermined appropriate prescribing habits." Beecham felt that this sentence, in addition to the campaign's concentration on amoxicillin, suggested that Beecham in particular was responsible for the antibiotic-prescribing problems at the Royal Melbourne. At the request of Beecham's director of research laboratories, John Sime, MD, Dr Harvey and Robert Moulds, PhD, FRACP, Chairman of the hospital's Pharmaceutical Advisory Committee (and a coauthor of the article) agreed to change the word "undermined" to "undermine" in the article proofs, in order to generalize the problem to the entire industry.

But the hospital has made no apologies for the campaign itself or for the decision to concentrate on amoxicillin as a test case. In competitive bidding in July, Commonwealth Serum Laboratories (an entity of the Australian government) was awarded the contract to supply amoxicillin to hospitals in Victoria.

THE AMERICAN PLAN

Dr Levy, an outspoken critic of antibiotic misuse, voiced his support of the Royal Melbourne's campaign in an interview with the *Journal*.

In addition, the *Journal* has learned that a drug "demarketing" campaign is in the planning stages in this country. Jerry Avorn, MD told the NYJ News Features that he has received a $200,000 grant from Blue Cross in support of his proposed demarketing campaign, which is designed to reduce prescribing problems at a test hospital, Beth Israel in Boston. Dr Avorn explained that the two year campaign, scheduled to begin next fall or winter, will be a multimedia approach to the problem. That is, it will include lectures on grand rounds, personal feedback, and a computer interactive teaching program that will guide physicians in their choice of drugs. Although the campaign is directed at drugs in general, he said that antibiotics head the list. The goal of the campaign is to achieve a significant reduction in money spent on drug therapy. The campaign is in response to the new Medicare reimbursement plan that will make only flat-rate reimbursements to acute care hospitals (see "News Briefs"). Dr Avorn said that he is concerned that the antibiotic resistance issue was being overly emphasized at the expense of the monetary aspect.

Meanwhile, the first issue of APUA's newsletter has appeared.

According to the newsletter, the goals of APUA are to educate both the medical profession and the general public about antibiotics and antibiotic use, as well as to promote an international policy for uniform antibiotic packaging clearly

The ad agency designed eye-catching, full color posters.

Page 14 carries a warning not to use amoxicillin in combination with penicillin to treat *H. influenzae.*

marked with instructions for use and possible side effects.

In his President's Message in the premier issue, Dr Levy states that there is a direct correlation between antibiotic use and the number of resistant organisms in a particular geographic area. In the same issue, Ernst Freese, PhD, of the National Institutes of Health states his view of the situation more dramatically:

> I am concerned that we are living in the presence of a time bomb. We do not know when or where the next epidemic will occur, but it will come if we do not change our ways. Unfortunately, some countries disregard the warnings of small epidemics by neither introducing nor enforcing laws limiting dispensation of antibiotics.

The criticism of bad prescribing habits voiced by even the most vocal advocates of judicious use of antibiotics, however, may not be as poignant—and biting—as Maxwell Finland's description over 30 years ago of the problem of antibiotic overuse (*Bull NY Acad Med* 1951;27: 199–220):

> One may summarize the many ancillary and prophylactic uses of antimicrobial agents in terms used by some of our leading politicians as literally offering protection to the individual from the "womb to the tomb." For, is not the mother, and perhaps the unborn child as well, protected by antibiotics during labor? And is not the first gasp of the infant to be followed almost immediately by the instillation of penicillin in the eye? And is not the infant thereafter to receive some antibiotic each time it sniffles, or looks poorly or has a fever? And are not all of his family to be treated to assure his being freed of sources of infection? And is he not to brush his teeth with an antibiotic-containing dentifrice twice daily as long as he lives or has teeth? And so it goes on until his dying day! And then, as he lies dying with his terminal cerebrovascular accident, or heart failure, or even should he be dying from a severe injury, can he be denied the antibiotics that may prevent a secondary pneumonia and thus fail to assure him of an adequate antibiotic concentration in his tissues as he is laid to rest?

PRELIMINARY RESULTS OF THE ROYAL MELBOURNE CAMPAIGN

Intravenous penicillin or amoxicillin in chest infections. A six week audit of 62 patients before the campaign disclosed that 56% of the patients received amoxicillin and 44% received penicillin. A three week audit of 48 patients after the campaign disclosed that 8% received amoxicillin and 92% received penicillin.

Dose of oral amoxicillin. A six week audit of 188 patients before the campaign disclosed that 36% received amoxicillin every six hours, and 64% received it every eight hours. A three week audit of 88 patients after the campaign disclosed that 10% received the higher dose of amoxicillin and 90% received the lower dose.

THE BACTERICIDAL POWER OF CERTAIN MUCH USED ANTISEPTICS

(*From the NY State J Med 1907;7:330*)

A large amount of testing of the bactericidal power of chemicals has been done, and certain substances have been accorded a positive value which clinical experience has endorsed. The profession has been rather prone in the case of certain other antiseptics to accept the reports of the promoters, who were commercially interested, as to their value. The same defects of judgment have been responsible for errors in estimating the value of well advertised external remedies as apply also to the much vaunted internal medicines. The profession often lost sight of the fact that bacteria are living cells, often spore-bearing and of a very high degree of vitality, lying beside the living animal cells of the human body, and that any chemical which came in contact with the former must also come in contact with the latter, and that to destroy bacteria by the application of chemicals meant also the destruction of the tissues in which they resided. There is no chemical which has a selective affinity for bacteria. The recognition of these facts marked the decline of the antiseptic method and the advent of the aseptic method in surgery. It was also discovered that certain so-called antiseptics were not antiseptics, but that bacteria would thrive in the very substances themselves, their virtue in the tissues depending upon their power to excite leucocytosis. This was found to be the case in certain insoluble powders employed against the tubercle bacillus; they acted simply as mechanical irritants to the tissues, increasing the inflammatory reaction, and served a purpose similar to the ptomaines of the bacteria or Bier's passive congestion. They increased the leucocytosis.

The value of many of these antiseptics is still undetermined; we should be warned, however, to distinguish between the tests of the impartial investigator and the reports of tests of the commercially interested. The British Medical Association started right by appointing a committee, the Therapeutic Committee, which made tests of the silver salts with a view to determining their efficiency in gonorrheal ophthalmia, and the work of our own Council on Pharmacy and Chemistry we are familiar with. Of the silver salts impartially tested by the British committee, it is shown that the two most potent salts are the fluoride and the nitrate of silver. We have been surprised to learn that the committee found that some of the much used preparations were very feeble in bactericidal power. They reported "collargol" and "argyrol" as practically without bactericidal action, and say that, "as argyrol and collargol are not bactericidal, it is evident that the amount of silver which a compound may contain is no criterion of its bactericidal power."[*]

In view of the great claims made by manufacturers, Verhoeff and Ellis, have made careful studies of some of the widely advertised antiseptics and found the claims of many of the exploiters of these preparations unsubstantiated.[†] They found that the addition of serum to a solution of sodium aurate, "protargol" or "argyrol" immediately destroyed the bactericidal power of the antiseptic. The number of such preparations was so large that they abandoned the idea of testing all of them, particularly as the formulas of many were the same. Using in their tests the *staphylococcus pyogenes aureus*, which they found was killed in one minute by a 1.1000 solution of mercuric chlorid or by a 2 per cent solution of phenol, they found as follows: The vitality of the organism was not destroyed after an exposure of over four hours to "Alkalol," 100 per cent; "Abbott's Vaginal Antiseptic," 2.5 per cent; "Borol," 50 per cent; "Glycothymoline," 100 per cent; or zinc-sulphocarbolate, 1 per cent. These so-called antiseptics, the authors say, could have little if any greater therapeutic value than simple salt solution. Certainly for the purposes for which they are recommended by their exploiters they could never have an opportunity of acting for over four hours in an undiluted condition. "Alphozone" and "Acetozone," which are recommended as internal remedies against typhoid fever, failed to kill typhoid bacilli after an exposure of twenty-four hours. The same obtained with zinc sulphocarbolate in 1 per cent solution. "Listerine," "Acetezone," "Alphozone," "Germicidal Disks" (mercuric iodid), "Nargol," "Sublimine," and "Mercurol"—none of these, in the strongest strength recommended, when mixed with an equal volume of hydrocile fluid, were effective even after two hours exposure to the organisms.

Still more light is needed upon the subject of antiseptics, but when we receive it we must be prepared to learn that the virtue in many of our antiseptic solutions has resided as much in the water as in the chemical which it contained.

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[*] *British Med. Jour.*, Aug. 18, 1906.

[†] Jour. Med. Assoc., June 29, 1907.

OBITUARIES

In addition to these listings, the Journal *welcomes obituaries written by physician readers. Inquiries should first be made to the Editor.*

Erich Adler, MD, New York. Died March 1, 1983; age 94. He graduated from Julius-Maximilians-University Medizinische Fakultat, Wurzburg, Bavaria in 1913. His memberships included the American Geriatrics Society, the New York County Medical Society, and the Medical Society of the State of New York.

Erich Auerbach, MD, New York City. Died May 28, 1983; age 84. He graduated from Friedrich-Wilhelms-Universitat Medical Fakultat Berlin, Prussia in 1927 and was a member of the New York County Medical Society and the Medical Society of the State of New York.

Anny Baumann, MD, New York. Died May 13, 1983; age 78 y. Dr. Baumann was a 1929 graduate of the Universitat Heidelberg Medizinische Fakultat, Baden. She was a member of the New York County Medical Society and the Medical Society of the State of New York.

Isidore Beris, MD, Brooklyn. Died June 5, 1983; age 82. He graduated from the State University of New York Downstate Medical Center in 1927 and was a member of the American Geriatrics Society, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

Frank James Borrelli, MD, Yonkers. Died June 11, 1983; age 78. He was graduated from the New York Medical College, Flower and Fifth Avenue Hospitals in 1933. Dr. Borelli was a Fellow of American College of American College of Gastroenterology and the American College of Radiology, a Diplomate American Board of Radiology, and a member of the New York Roentgen Society, the Academy of Medicine, the New York County Medical Society and the Medical Society of the State of New York.

William Joseph Burns, MD, Schenectady. Died May 23, 1983; age 72. In 1938 he graduated from Albany Medical College of Union University. He was a fellow of the American College of Allergists, a member of the American Academy of Allergy, the Medical Society of the County of Schenectady, and the Medical Society of the State of New York.

Charles Anthony Collins, MD, Thornwood. Died April 8, 1983; age 83. He was a Diplomate of the American Board of Internal Medicine and his memberships included the American Geriatrics Society, the New York State Society of Internal Medicine, the Academy of Medicine, the Medical Society of the county of Westchester, and the Medical Society of the State of New York.

Louis Reis Davidson, MD, New York City. Died May 30, 1983; age 89. He graduated from New York University College of Medicine in 1918 and was a member of the New York County Medical Society and the Medical Society of the State of New York.

Edward M. Di Tolla, MD, New York City. Died May 19, 1983; age 76. Dr. DiTolla was a 1933 graduate of State University of New York Downstate Medical Center (Long Island College of Medicine), a Diplomate American Board of Pediatrics and a member of the American Academy of Pediatrics, the American Academy of Allergy, the American Public Health Association, the New York County Medical Society, and the Medical Society of the State of New York.

Anthony Firenzi, MD, Huntington. Died July 1, 1983; age 86. He was a 1923 graduate of the Universita Degli Studi di Pavia, Facolta di Medicina e Chirurgia and was a Fellow of the American College of Cardiology. His memberships included the Suffolk County Medical Society and the Medical Society of the State of New York.

Seymour Fiske, MD, New York City. Died February 11, 1983; age 88. Dr. Fiske graduated from the University of Pennsylvania School of Medicine in 1920. He was a Diplomate of the American Board of Internal Medicine and the American Board of Preventive Medicine, Inc. He was also a Fellow of the American College of Physicians the American College of Cardiology, and the American Academy of Family Physicians. His memberships included the New York Cardiological Society, the New York County Medical Society, and the Medical Society of the State of New York.

Karl Anthony Garten, MD, Lewiston. Died June 29, 1983; age 68. Dr. Garten was a 1940 graduate of the Dalhousie University Faculty of Medicine, Halifax. He was a Diplomate of the American Board of Radiology, and a member of the Academy of Medicine, the Medical Society of the County of Niagara, and the Medical Society of the State of New York.

Abraham Adolf Geffner, MD, New York City. Died May 13, 1983; age 76. He attended the Universitat Heidelberg Medizinische Fakultat, Baden, and graduated in 1934. Dr. Geffner was a member of the New York County Medical Society and the Medical Society of the State of New York.

Alfred Glauber, MD, Flushing. Died June 6, 1983; age 86. He graduated in 1923 from Deutsche Universitat Medizinische Fakultat, Prague. His memberships included the Clinical Society of the New York Diabetes Association, the New York Cardiological Society, the New York County Medical Society and the Medical Society of the State of New York.

Paul Morton Gold, MD, Jackson Heights. Died June 29, 1983; age 65. He was a 1945 graduate of the New York Medical College, Flower and Fifth Avenue Hospital. Dr. Gold was a Fellow of the American College of Obstetricians and Gynecologists, a Qualified Fellow of the International College of Surgeons, and a Diplomate of the American Board of Obstetrics and Gynecology. His memberships included the Medical Society of the County of Queens and the Medical Society of the State of New York.

Sidney M. Greenberg, MD, Old Westbury. Died June 18, 1983; age 78. A 1928 graduate of Cornell University Medical College, his memberships included the Academy of Medicine, the American Public Health Association, the New York County Medical Society and the Medical Society of the State of New York.

Maurice Grozin, MD, Flushing. Died December 7, 1978; age 89. He was a 1922 graduate of Yale University School of Medicine and a member of the Academy of Medicine, the Medical Society of the County of Queens, and the Medical Society of the State of New York.

Halford Hallock, MD, Gwynedd, Pennsylvania. Died January 11, 1983; age 84. Dr. Hallock graduated from Columbia University College of Physicians and Surgeons in 1923 and was a member of the New York County Medical Society and the Medical Society of the State of New York.

Edward Francis Higgins, MD, Sebastian, Florida. Died June 21, 1983; age 69. He attended the University of Rochester School of Medicine and Dentistry and graduated in 1940. Dr. Higgins was a member of the Cortland County Medical Society and the Medical Society of the State of New York.

Morris N. Josell, MD, Hollywood, FL. Died May 3, 1983; age 86. In 1919 he graduated from New York University College of Medicine. His memberships included the Medical Society of the County of Kings and the Medical Society of the State of New York.

Siegfried Julich, MD, New York City. Died May 20, 1983; age 83. He graduated from Medizinische Akademie Dusseldorf in 1932 and was a member of the New York County Medical Society and the Medical Society of the State of New York.

John C. Kinzly, MD, North Tonawanda. Died May 23, 1983; age 78. He graduated from University of Buffalo School of Medicine in 1934. Dr. Kinzly was a member of the American Occupational Medical Association, the Medical Society of the County of Niagara, and the Medical Society of the State of New York.

Louis Kolbrenner, MD, Brooklyn. Died June 8, 1983; age 75. Dr. Kolbrenner was a 1933 graduate of the University of Buffalo School of Medicine. He was a Diplomate of the American Board of Dermatology, Inc. and a member of the American Academy of Dermatology, the New York State Dermatological Society, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

Ali Djelal Koprenska, MD, Woodbury. Died July 16, 1983; age 70. Dr. Koprenska was a 1943 graduate of the Universita Degli Studi di Bologna, Facolta di Medicina e Chirurgia. and was a member of the Nassau County Medical Society and the Medical Society of the State of New York.

Sidney Levy, MD, Flushing. Died April 10, 1983; age 73. In 1934 he graduated from New York University College of Medicine. He was a member of the Medical Society of the County of Queens, and the Medical Society of the State of New York.

Julia V. Lichtenstein, MD, New York City. Died May 7, 1983; age 86. She was a 1923 graduate of Columbia University College of Physicians and Surgeons and a Fellow of the American College of Physicians. Her memberships included the Academy of Medicine, the American Geriatrics Society, the American Medical Women's Association the New York County Medical Society and the Medical Society of the State of New York.

Alfred Walter Lucas, MD, Elmira. Died June 20, 1983; age 70. Dr. Lucas graduated from Albany Medical College of Union University in 1943 and was a Diplomate of the American Board of Surgery, a Fellow of the American College of Surgeons and a member of the Medical Society of the County of Chemung and the Medical Society of the State of New York.

Domenico Manetti, MD, Bayside. Died January 3, 1983; age 89. He attended the Universita Degli Studi Di Siena, Facolta Di Medicina e Chirurgia and graduated in 1920. Dr. Manetti was a member of the Medical Society of the County of Queens and the Medical Society of the State of New York.

Herman L. Maslow, MD, Miami Beach, Florida. Died July 2, 1983; age 87. Dr. Maslow graduated from New York University College of Medicine in 1921 and was a member of the Medical Society of the County of Kings and the Medical Society of the State of New York.

Fred Henry Mehlhop, MD, Lake Grove. Died June 6, 1983; age 52. He was a 1957 graduate of the University of Maryland School of Medicine. Dr. Mehlhop was a Diplomate of the American Board of Pediatrics and a member of the American Academy of Pediatrics, the Suffolk County Medical Society and the Medical Society of the State of New York.

Albert Joseph Montani, MD, Williamsville. Died June 27, 1983; age 65. He graduated from the University of Buffalo School of Medicine in 1944 and was a member of the Medical Society of the County of Niagara and the Medical Society of the State of New York.

Walter Mueller, MD, Wappingers Falls. Died June 16, 1983; age 79. He graduated in 1927 from Medizinische Fakultat Der Universitat, Wien and was a member of the Dutchess County Medical Society and the Medical Society of the State of New York.

Ludwig Neugarten, MD, Bearsville. Died April 11, 1983; age 93. He was a 1914 graduate of the Albert Ludwigs University Medizinische Fakultat, Freiburg, Baden. His memberships included the New York County Society and the Medical Society of the State of New York.

Ernest B. Newman, MD, Sarasota, Florida. Died June 16, 1983; age 70. Dr. Newman graduated from Columbia University College of Physicians and Surgeons in 1938. Dr. Newman was a Diplomate of the American Board of Radiology. His memberships included the American Occupational Medical

Association, the New York County Medical Society and the Medical Society of the State of New York.

Robert R. Northrup, MD, Westfield. Died July 17, 1983; age 78. He was a 1932 graduate of the University of Buffalo School of Medicine. His memberships included the American Academy of Family Practice, the Medical Society of the County of Chautauqua, and the Medical Society of the State of New York.

Raymond King Pendleton, MD, Islesboro, Maine. Died July 2, 1983; age 82. He graduated from McGill University Faculty of Medicine in Montreal in 1926 and was a member of the Medical Society of the County of Kings and the Medical Society of the State of New York.

Leonard Benjamin Di Re, MD, New York City. Died May 25, 1983; age 55. He graduated from George Washington University School of Medicine in 1957. Dr. Di Re was a member of the New York County Medical Society and a member of the Medical Society of the State of New York.

Francis William Rosenberger, MD, Syracuse. Died June 29, 1983; age 81. Dr. Rosenberger attended the State University of New York Upstate Medical Center at Syracuse and graduated in 1926. He was a member of the Academy of Medicine, the Onondaga County Medical Society, and the Medical Society of the State of New York.

Charles G. Rosenstock, MD, Ellenville. Died June 11, 1983; age 75. Dr. Rosenstock was a graduate of the Licentiate of the Royal College of Physicians of Edinburgh. His memberships included the Medical Society of the County of Ulster and the Medical Society of the State of New York.

Lucian C. Rutecki, MD, Buffalo. Died March 2, 1983; age 82. He graduated in 1925 from the University of Buffalo School of Medicine and was a member of the Medical Society of the County of Erie and the Medical Society of the State of New York.

Siegfried Salomon, MD, Staten Island. Died December 6, 1982; age 85. He graduated from the Universitat Heidelberg Medizinische Fakultat, Baden in 1921. Dr. Salomon is a Fellow of American College of Chest Physicians, a Fellow of the American College of Cardiology, a member of the Richmond County Medical Society and the Medical Society of the State of New York.

Vito F. Santangelo, MD, New York City. Died January 17, 1983; age 71. He graduated in 1936 from the Universita Degli Studi di Roma, Facolta di Medicina e Chirurgia. Dr. Santangelo was a member of the New York County Medical Society and the Medical Society of the State of New York.

Nathan Oscar Sara, MD, Brooklyn. Died August 11, 1982; age 73. Dr. Sara was 1934 graduate of New York Medical College, Flower and Fifth Avenue Hospitals. He was a Fellow of American College of Chest Physicians and a member of the American Thoracic Society, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

John Sassani, MD, Binghamton. Died April 21, 1983; age 79. Dr. Sassoni was a 1930 graduate of Cornell University Medical College and a member of the American Geriatrics Society, the Broome County Medical Society, and the Medical Society of the State of New York.

William Schick, MD, New York City. Died March 24, 1983; age 81. Dr. Schick graduated from the State University of New York Downstate Medical Center in 1926 (Long Island College Hospital) and was a Diplomate of the American Board of Psychiatry and Neurology. His memberships included the American Psychoanalytic Association, the American Psychiatric Association, the New York County Medical Society, and the Medical Society of the State of New York.

Elack Schultz, MD, Bayside. Died May 31, 1983; age 72. Dr. Schultz was a 1937 graduate of the Universite de Lausanne Faculte de Medecine and his memberships included the American Academy of Family Practice, the Medical Society of the County of Queens, and the Medical Society of the State of New York.

Joseph N. Silverstein, MD, Brooklyn. Died December 26, 1982; age 52. Dr. Silverstein was a 1955 graduate of State University of New York Downstate Medical Center. He was a fellow of American College of Physicians and a Diplomate of the American Board of Internal Medicine. His memberships included the New York State Society of Internal Medicine, the Endocrine Society, the Medical Society of the County of Kings, and the Medical Society of the State of New York.

Alan De Forest Smith, MD, Southampton. Died June 24, 1983; age 92. He was a 1915 graduate of Columbia University College of Physicians and Surgeons. Dr. Smith was a Fellow the American College of Surgeons and a Diplomate of the American Board of Orthopedic Surgery. His memberships included the Academy of Medicine, the American Academy of Orthopedic Surgeons, the American Orthopedic Association, the New York County Medical Society, and the Medical Society of the State of New York.

Aaron Stein, MD, New York City. Died June 1, 1983; age 70. He was a 1938 graduate of the University of Maryland School of Medicine in 1938. Dr. Stein was a Diplomate of the American Board of Psychiatry and Neurology, a member of the Academy of Medicine, the American Public Health Association, the American Psychiatric Association, the Academy of Psychosomatic Medicine, the Pan American Medical Association, New York County Medical Society, and the Medical Society of the State of New York.

Fred D. Stone, MD, Niagara Falls. Died May 16, 1983; age 84. He graduated from University of Illinois College of Medicine in 1931. He was a Fellow of the American College of Pathologists, a Diplomate of the American Board of Pathology, and a member of the American Society of Clinical Pathologists, the Medical Society of the County of Niagara, and the Medical Society of the State of New York.

Edward Tolstoli, MD, New York. Died May 22, 1983 age 86. He graduated in 1923 from Cornell University Medical College. His memberships included the Academy of Medicine, and the Society for Experimental Biology and Medicine as well as the New York County Medical Society, and the Medical Society of the State of New York.

William L. Tucker, MD, New York City. Died July 6, 1983 age 84. Dr. Tucker attended the University of Toronto Faculty of Medicine and graduated in 1923. He was a member of the New York County Medical Society and the Medical Society of the State of New York.

Thomas I. Tyrrell, MD, Albany. Died April 1, 1983; age 79. He graduated from Georgetown University School of Medicine in 1927 and was a member of the Medical Society of the County of Albany and the Medical Society of the State of New York.

Irwin Miller Walker, MD, Niagara Falls. Died June 17, 1983; age 85. He graduated in 1922 from the University of Buffalo School of Medicine. He was a member of the American Association for Cancer Research, the Medical Society of the County of Niagara, and the Medical Society of the State of New York.

Joseph Walzer, MD, Chatham. Died on March 27, 1983; age 71. Dr. Walzer was a 1938 graduate of Rush Medical College a Diplomate American Board of Psychiatry and Neurology, a member of American Psychiatric Association, the Nassau County Medical Society, and the Medical Society of the State of New York.

Harold E. Wass, MD, Orchard Park. Died May 21, 1983; age 68. He was a 1938 graduate of the University of Buffalo School of Medicine and a Diplomate of the American Board of Ophthalmology. His memberships included the Medical Society of the County of Erie, and the Medical Society of the State of New York.

Paul H. Watson, MD, Southbury, CT. Died May 29, 1983; age 79. In 1930 he graduated from Yale University School of Medicine. His memberships include the Medical Society of the County of Queens and the Medical Society of the State of New York.

Nathan Weinstein, MD, New York City. Died August 31, 1982; age 83. Dr. Weinstein graduated from Tufts University School of Medicine in 1925. He was a member of the Medical Society of the County of Queens and the Medical Society of the State of New York.

Samuel J. Weitzen, MD, Harbor Island, FL. Died May 11, 1983; age 85. He was a 1928 graduate of the Universite de Geneve Faculte de Medecine. He was a member of the Bronx County Medical Society and the Medical Society of the State of New York.

Gareth S. West, MD, of Chittenango. Died July 15, 1983; age 62. A 1946 graduate of the State University of New York Upstate Medical Center at Syracuse, Dr. West was a member of the Medical Society of the County of Madison and the Medical Society of the State of New York.

Davis Abraham Workman, MD, Staten Island. Died May 27, 1983; age 72. He was a graduate of the Universitat Bern Medizinische Fakultat. He was a member of the American Academy of Family Practice, the New York Cardiological Society, the Richmond County Medical Society, and the Medical Society of the State of New York.

Guidelines for authors

ORIGINALITY

The *New York State Journal of Medicine* welcomes research papers and original essays on the practice of medicine, medical education, public health, the history of medicine, medicolegal matters, legislation, ethics, the mass media and socioeconomic issues in health care.

Manuscripts should be prepared according to the "Uniform requirements for manuscipts submitted to biomedical journals," (*NY State J Med* 1983; 83:1089–92. The requirements were established by the International Committee of Medical Journal Editors, of which the *Journal* is a participating member. These Guidelines are intended to highlight aspects of the *Journal's* particular style of publication.

A manuscript will be considered for publication if it is original, has not been published previously in whole or in part in either a medical journal or a lay publication, and is not simultaneously under consideration elsewhere. A copy of any possibly duplicative material, such as a reference "in press," should be submitted along with the manuscript.

PREPARATION

An original typewritten or "word-processed" manuscript and two photocopies (to facilitate outside review) are required. If the manuscript is not accepted for publication, the original and one copy will be returned. All figures must be submitted in triplicate. The manuscript should be double-spaced throughout, including references, tables, legends, quotations, and acknowledgments. A separate title page should include the full title of the paper in upper and lower case type, the names of the authors exactly as they should appear in print (including their highest academic degree), an abbreviated title of no greater than 40 spaces for use as a running foot, and the names of all providers of funding for research on which the paper is based. Information on the amount and allocation of funding is optional.

A corresponding author should be designated in the covering letter. Authors should list their title and affiliation at the time they did the work, and, if different, their present affiliation. The addresses and telephone numbers of all authors should be supplied for editorial purposes. All authors of a manuscript are responsible for having read and approved it for submission.

CATEGORIES

Research Papers should be limited to 2,500 words and should include the following sections: Introduction, Methods, Discussion, and References. Multiple subheadings and numbered lists are discouraged. An abstract limited to 150 words should state the reasons for the study, the main findings, and their implications. Statistical evaluations should be described in the Methods section, and the name and affiliation of the statistician should be included in the acknowledgments if this individual is not listed as a coauthor. Reports of experiments involving human subjects must include a description in the Methods section of the informed consent obtained and a statement that the procedures followed were approved by an institutional research review committee. Anonymity of patients must be preserved. Reports of experiments on animals must note which guidelines were followed for the care and use of laboratory animals.

Preference will be given to Case Reports limited to 1,250 words. Review Articles should not exceed 3,000 words. Commentaries should be between 750 and 1,000 words. Other kinds of original essays should not exceed 2,000 words. A letter of inquiry should be sent to the editor prior to submitting a Review Article or Commentary.

For Research Papers only, scientific measurements should be given in conventional units, with Système Internationale (SI) units in parentheses. Abbreviations and acronyms should be kept to a minimum, and jargon should be avoided. Generic names of drugs should be used instead of brand names.

FIGURES

The submission of color illustrations or slides is discouraged. Only black and white glossy photographic prints or "camera-ready" artwork will be accepted. The *Journal* is unable to provide art services such as the addition of arrows to photographs. A signed consent for publication must accompany photographs in which the patient is identifiable. Illustrations from other publications generally will not be considered. Legends for illustrations should be typed on a separate sheet, and for photomicrographs should include magnification and stain. Each illustration should be lightly marked on the back in pencil with the name of the first author, the number as cited in the text, and an arrow indicating the top. Each set of illustrations should be submitted unmounted in a separate envelope.

Tables should be simple, self-explanatory, and few in number. Each table should be typed double-spaced on a separate sheet.

REFERENCES

References should be limited to the most pertinent. The recommended maximum number of references is 25 for Research Papers and most other original contributions (except lengthier Review Articles), 12 for Commentaries and Case Reports, and 6 for letters to the editor.

Authors are responsible for the accurate citation of references. Citation of secondary sources is discouraged except where the original reference is unobtainable. Authors may not cite references they have not read, and the use of abstracts as references should be avoided.

References should be indicated in the text by superscript numbers following the name of the author (eg, Smith^2 reported two cases).

The list of references at the end of the article should be typed double-spaced and references should be numbered in the order in which they appear on the text. When there are six or fewer authors, all should be listed; where there are seven or more, the first three should be listed, followed by *et al.* Names of journals should be abbreviated according to *Index Medicus* and underlined.

Sample references:

1. Kepes ER, Thomas P, Vemulapalli K: Methadone and intravenous morphine requirements. *NY State J Med* 1983; 83:925–927.
2. McGuigan JE. Peptic ulcer. In: Petersdorf RG, Adams RD, Braunwald E, Isselbacher KJ, Martin JB, Wilson JD, eds. *Harrison's Principles of Internal Medicine.* New York, McGraw-Hill, 1983, pp 1697–1712.

REVIEW

All manuscripts are reviewed by the editors, and most manuscripts are sent to outside referees. Decisions concerning acceptance, revision, or rejection of a manuscript are usually made within three to six weeks. Every effort will be made to assure prompt publication of an accepted manuscript. A copyedited version will be sent to the author for approval prior to publication.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, impending or acute delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in: relief of skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome. *Oral forms* may be used adjunctively in convulsive disorders, but not as sole therapy. *Injectable form* may also be used adjunctively in: status epilepticus; severe recurrent seizures; tetanus; anxiety, tension or acute stress reactions prior to endoscopic/surgical procedures; cardioversion.

The effectiveness of diazepam in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindications: Tablets or capsules in children under 6 months of age; known hypersensitivity; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: As with most CNS-acting drugs, caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals (drug addicts or alcoholics) under careful surveillance because of predisposition to habituation/dependence.

> *Usage in Pregnancy:* **Use of minor tranquilizers during first trimester should almost always be avoided because their use is rarely a matter of urgency and because of increased risk of congenital malformations, as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

ORAL. Advise patients against simultaneous ingestion of alcohol and other CNS depressants.

Not of value in treatment of psychotic patients; should not be employed in lieu of appropriate treatment. When using oral forms adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may be associated with temporary increase in frequency and/or severity of seizures.

INJECTABLE: *To reduce the possibility of venous thrombosis, phlebitis, local irritation, swelling and, rarely, vascular impairment when used I.V.: inject slowly, taking at least one minute for each 5 mg (1 ml) given; do not use small veins,* i.e., *dorsum of hand or wrist; use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Injectable Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.*

Administer with extreme care to elderly, very ill, those with limited pulmonary reserve because of possibility of apnea and/or cardiac arrest; concomitant use of barbiturates, alcohol or other CNS depressants increases depression with increased risk of apnea; have resuscitative facilities available. When used with narcotic analgesic eliminate or reduce narcotic dosage at least 1/3, administer in small increments. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs.

Has precipitated tonic status epilepticus in patients treated for petit mal status or petit mal variant status. Not recommended for OB use.

Efficacy/safety not established in neonates (age 30 days or less); prolonged CNS depression observed. In children, give slowly (up to 0.25 mg/kg over 3 minutes) to avoid apnea or prolonged somnolence; can be repeated after 15 to 30 minutes. If no relief after third administration, appropriate adjunctive therapy is recommended.

Precautions: If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of diazepam, *i.e.*, phenothiazines, narcotics, barbiturates, MAO inhibitors and antidepressants. Protective measures indicated in highly anxious patients with accompanying depression who may have suicidal tendencies. Observe usual precautions in impaired hepatic function; avoid accumulation in patients with compromised kidney function. Limit oral dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed and tolerated).

The clearance of diazepam and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.

INJECTABLE. Although promptly controlled, seizures may return; readminister if necessary; not recommended for long-term maintenance therapy. Laryngospasm/increased cough reflex are possible during peroral endoscopic procedures; use topical anesthetic, have necessary countermeasures available. Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol. Use lower doses (2 to 5 mg) for elderly/debilitated.

Adverse Reactions: Side effects most commonly reported were drowsiness, fatigue, ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, discontinue drug.

Because of isolated reports of neutropenia and jaundice, periodic blood counts, liver function tests advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, observed in patients during and after diazepam therapy are of no known significance.

INJECTABLE: Venous thrombosis/phlebitis at injection site, hypoactivity, syncope, bradycardia, cardiovascular collapse, nystagmus, urticaria, hiccups, neutropenia.

In peroral endoscopic procedures, coughing, depressed respiration, dyspnea, hyperventilation, laryngospasm/pain in throat or chest have been reported.

Dosage: Individualize for maximum beneficial effect.

ORAL: *Adults:* Anxiety disorders, relief of symptoms of anxiety—Valium (diazepam/Roche) tablets, 2 to 10 mg b.i.d. to q.i.d.; or 1 or 2 Valrelease capsules (15 to 30 mg) daily. Acute alcohol withdrawal—tablets, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; or 2 capsules (30 mg) the first 24 hours, then 1 capsule (15 mg) daily as needed. Adjunctively in skeletal muscle spasm—tablets, 2 to 10 mg t.i.d. or q.i.d.; or 1 or 2 capsules (15 to 30 mg) once daily. Adjunctively in convulsive disorders—tablets, 2 to 10 mg b.i.d. to q.i.d.; or 1 or 2 capsules (15 to 30 mg) once daily.

Geriatric or debilitated patients: Tablets—2 to 2½ mg 1 or 2 times daily initially, increasing as needed and tolerated (see Precautions). Capsules—1 capsule (15 mg) daily when 5 mg oral Valium has been determined as the optimal daily dose.

Children: Tablets—1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use in children under 6 months). Capsules—1 capsule (15 mg) daily when 5 mg oral Valium has been determined as the optimal daily dose (not for use in children under 6 months).

INJECTABLE: Usual initial dose in older children and adults is 2 to 20 mg I.M. or I.V., depending on indication and severity. Larger doses may be required in some conditions (tetanus). In acute conditions injection may be repeated within 1 hour, although interval of 3 to 4 hours is usually satisfactory. Lower doses (usually 2 to 5 mg) with slow dosage increase for elderly or debilitated patients and when sedative drugs are added. (See Warnings and Adverse Reactions.)

For dosages in infants and children see below; have resuscitative facilities available.

I.M. use: by deep injection into the muscle.

I.V. use: inject slowly, take at least one minute for each 5 mg (1 ml) given. Do not use small veins, i.e., *dorsum of hand or wrist. Use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute Valium with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.*

Moderate anxiety disorders and symptoms of anxiety, 2 to 5 mg I.M. or I.V., and severe anxiety disorders and symptoms of anxiety, 5 to 10 mg I.M. or I.V., repeat in 3 to 4 hours if necessary; acute alcohol withdrawal, 10 mg I.M. or I.V. initially, then 5 to 10 mg in 3 to 4 hours if necessary. Muscle spasm, in adults, 5 to 10 mg I.M. or I.V. initially, then 5 to 10 mg in 3 to 4 hours if necessary (tetanus may require larger doses); in children *administer I.V. slowly*; for tetanus in infants over 30 days of age, 1 to 2 mg I.M. or I.V., repeat every 3 to 4 hours if necessary; in children 5 years or older, 5 to 10 mg repeated every 3 to 4 hours as needed. Respiratory assistance should be available.

Status epilepticus, severe recurrent convulsive seizures (I.V. route preferred), 5 to 10 mg adult dose administered slowly, repeat at 10- to 15-minute intervals up to 30 mg maximum. Repeat in 2 to 4 hours if necessary, keeping in mind possibility of residual active metabolites. Use caution in presence of chronic lung disease or unstable cardiovascular status. Infants (over 30 days) and children (under 5 years), 0.2 to 0.5 mg slowly every 2 to 5 min., up to 5 mg (I.V. preferred). Children 5 years plus, 1 mg every 2 to 5 min., up to 10 mg (slow I.V. preferred); repeat in 2 to 4 hours if needed. EEG monitoring may be helpful.

In endoscopic procedures, titrate I.V. dosage to desired sedative response, generally 10 mg or less but up to 20 mg (if narcotics are omitted) immediately prior to procedure; if I.V. cannot be used, 5 to 10 mg I.M. approximately 30 minutes prior to procedure. As preoperative medication, 10 mg I.M.; in cardioversion, 5 to 15 mg I.V. within 5 to 10 minutes prior to procedure. Once acute symptomatology has been properly controlled with injectable form, patient may be placed on oral form if further treatment is required.

Management of Overdosage: Manifestations include somnolence, confusion, coma, diminished reflexes. Monitor respiration, pulse, blood pressure; employ general supportive measures, I.V. fluids, adequate airway. Use levarterenol or metaraminol for hypotension. Dialysis is of limited value.

How Supplied:

ORAL: Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100 and 500; Prescription Paks of 50, available in trays of 10; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25 and in boxes containing 10 strips of 10.

Valrelease (diazepam/Roche) slow-release capsules—15 mg (yellow and blue), bottles of 100; Prescription Paks of 30.

INJECTABLE: Ampuls, 2 ml, boxes of 10; Vials, 10 ml, boxes of 1; Tel-E-Ject® (disposable syringes), 2 ml, boxes of 10. Each ml contains 5 mg diazepam, compounded with 40% propylene glycol, 10% ethyl alcohol, 5% sodium benzoate and benzoic acid as buffers, and 1.5% benzyl alcohol as preservative.

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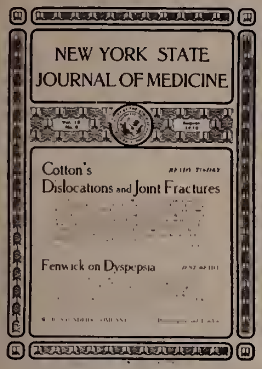
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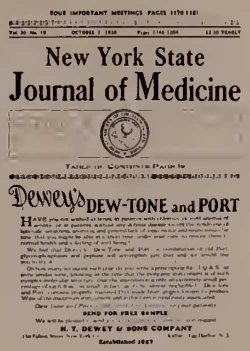
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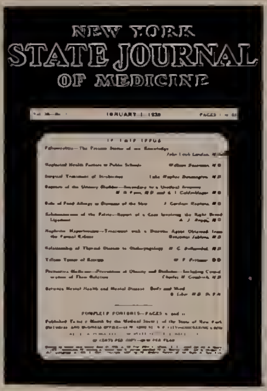
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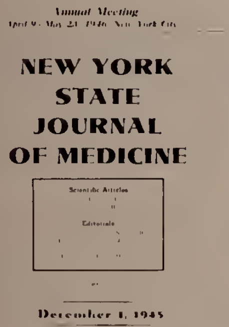
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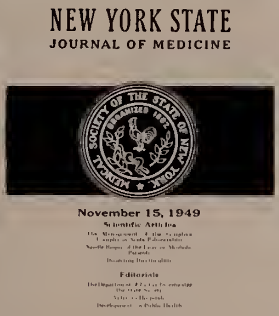
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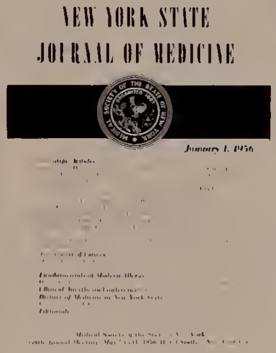
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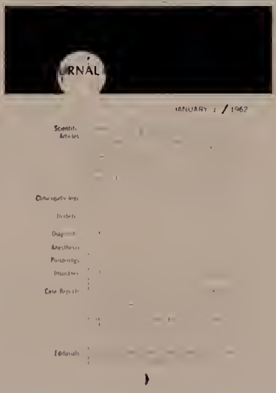
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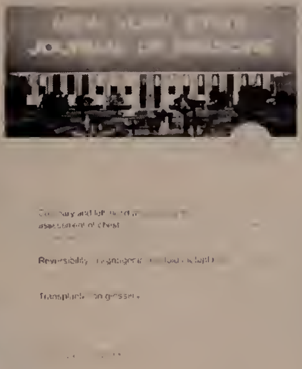
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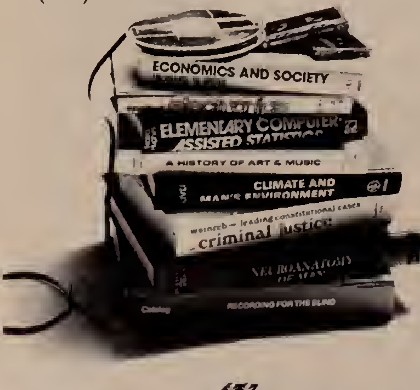

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Advances in Hematology and Oncology–Radiation Therapy of Advanced Breast Cancer. November 2, 1983. For information contact: Div. of Hematology and Oncology, Interfaith Medical Center. Telephone: (212) 240-1211/1212.

Treatment of Ovarian Cancer. November 9, 1983. For information contact: Div. of Hematology and Oncology, Interfaith Medical Center. Telephone: (212) 240-1211/1212.

Pathophysiology, Diagnosis and Treatment of Polycythemia Vera. November 16, 1983. For information contact: Division of Hematology and Oncology, Interfaith Medical Center. Telephone: (212) 240-1211/1212.

Current Advances in Rhematology. November 20, 1983. For information contact: Miss Hazel Spadafora, Kings County Medical Society. Telephone: (212) 467-9000.

Marrow Transplantation in Leukemia. November 30, 1983. For information contact: Hematology/Oncology, Interfaith Medical Center. Telephone: (212) 240-1211/1212.

Toward the Reduction of Mortality of Pneumonia in the Elderly Through Treatment and Intervention. November 30, 1983. For information contact: Ingrid Schmidt, Kings County Health Care Review Organization, Inc. Telephone: (212) 467-9032.

Seminar in Geriatric Medicine. November 16, 1983. For information contact: Harvey C. Shapiro, MD, Metropolitan Jewish Geriatric Center. Telephone: (212) 853-2800, ext. 313.

QUEENS

Annual Intensive Review for Family Physicians. October 2, 1983 to April 1, 1984. For information contact: Edward Davis, MD. Peninsula Hospital Center. Telephone: (212) 945-7100, ext. 377.

Second Annual Review in Internal Medicine-Cardiovascular Diseases. November 20, 1983. For information contact: Luisa T. Gonzalez, Flushing Hospital & Medical Center. Telephone: (212) 670-5741.

NASSAU COUNTY

1983/84 Lectures on Continuing OB/GYN Education. November 1, 1983.

1983/84 Lectures in Continuing OB/**GYN Education: Symposium-Gynecologic Urology-Management of Fetal Hydrocephalus.** November 15, 1983. **Role of Estrogen Replacement.** November 22, 1983. For information contact: Mary Leong, MD, Nassau County Medical Center. Telephone: (516) 542-2256.

Topics in Perinatal Medicine. **Physiology of Fetal Heart Rate Changes.** November 4, 1983. **Umbilical Velocity Wave forms in Normal and Abnormal Pregnancy.** November 18, 1983. For information contact: Nergesh Tejani, MD, Nassau County Medical Center. Telephone: (516) 542-2257.

Children of Divorce. November 4, 1983. **The Effects of the Holocaust on Survivors and Their Children.** November 18, 1983. For information contact: Clement Boccalini, MD, Nassau County Medical Center. Telephone: (516) 542-0123.

Interventional Radiology. November 10, 1983. For information contact: Dr. Pochaczevsky, Dept. of Radiology, Long Island Jewish Hillside Medical Center, New Hyde Park, NY 11042.

Optic Nerve Disease. November 10, 1983. For information contact: North Shore University Hospital, 300 Community Drive, Manhasset, NY 11030.

Recent Developments in the Treatment of Disturbed Adolescents. November 18, 1983. For information contact: Ann J. Boehme, Long Island Jewish-Hillside Medical Center. Telephone: (212) 470-2114.

A Clinical Day in Ophthalmology: Glaucoma. November 30, 1983. For information contact: Ann J. Boehme, Long Island Jewish-Hillside Medical Center. Telephone: (212) 470-2114.

ST. LAWRENCE

Abnormal Pap Smears and Culdoscopy. November 10, 1983. For information contact: Sebastian A. Mazzotta, MD, Canton-Potsdam Hospital. Telephone: (315) 265-3350.

Surgical State of the Art in Valvular Heart Disease. November 17, 1983. For information contact: Sebastian A. Mazzotta, MD, The Medical Society of the County of St. Lawrence. Telephone: (315) 265-3300, ext. 4202.

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AROUND THE STATE

ERIE

Anesthetic Management of the Elderly Patient. Buffalo November 21–23, 1983. For information contact: Kurt G. Becker, The New York State Society of Anesthesiologists. Telephone: (212) 867-7140.

Molecular Events in Differentiation and Neoplasia. November 10, 1983. For information contact: Gayle Bersani, RN, Roswell Park Memorial Institute. Telephone: (716) 845-4406.

BROOME

Clinical Seminar in Medicine–Inflammatory Bowel Disease. Johnson City November 3, 1983. Diabetes Insipidus. November 17, 1983. For information contact: Continuing Medical Education Dept., Wilson Hospital, Johnson City, NY 13790.

SUFFOLK

Microscopy Workshop. November 19, 1983. For information contact: Tamarath K. Yolles, MD, SUNY. Telephone: (516) 444-2094.

(*continued on page 1215*)

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Advanced Cardiac Life Support Providers Course. Syracuse November 16–18. For information contact: Betty Frost, SUNY. Telephone: (315) 473-4606.

WESTCHESTER

Clinical Applications of Narcotics: Newer Aspects of Anesthesia for Caesarean Section and Pediatric Anesthesia. For information contact: Kurt G. Becker, The New York State Society of Anesthesiologists. Telephone: (212) 867-7140.

Diabetes Day. November 30, 1983. For information contact: Toni Galabrese Boelsen, White Plains Hospital Medical Center. Telephone: (914) 681-1118.

AROUND THE NATION

CALIFORNIA

The 1983 Combined Annual Meetings of the American Congress of Rehabilitation Medicine and American Academy of Physical Medicine and Rehabilitation. November 6–11, 1983. For information contact: Mr. Marvin Schroder. Telephone: (312) 236-9512.

The Decline in Coronary Heart Disease Mortality—The Role of Cholesterol Change. November 13, 1983. For information contact: Medical & Pharmaceutical Information Bureau, Inc., 10 East End Avenue, New York, NY 10021. Telephone: (212) 535-8900.

Symposium on Familial Diseases. November 11, 1983. For information contact: Dr. Heather Davis, Division of Family Practice, University of California School of Medicine, AC9, San Francisco, CA 94143.

FLORIDA

Internal Medicine Update '83. November 7–11, 1983. For information contact: Program Coordinator, SUNY. Telephone: (315) 473-4304 or 4606.

Applied Bioethics for the Health Care Professions: **Confronting the Issues in Ethics, Law and Medicine.** November 10–13, 1983. For information contact: Sidney M. Goetz, Telephone: (813) 347-2124 or (813 381-4606.

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*Shaw S, Lieber CS: Nutrition and alcoholism, chap. 40, in *Modern Nutrition in Health and Disease*, edited by Goodhart RS, Shils ME; Philadelphia, Lea & Febiger, 1980, pp. 1220, 1237.

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First Annual Midyear Conference and Career Planning Seminar. November 10–13, 1983. For information contact: The National Student Nurse's Association, Inc., 10 Columbus Circle, Room 2330, New York, NY 10019. Telephone: (212) 581-2211.

MARYLAND

Annual Meeting, Southern Medical Association. November 6–9, 1983. For information contact: Theresa Setz, SMA, P.O. Box 2446, Birmingham, AL 35201.

MASSACHUSETTS

Advanced Trauma Life Support Courses. November 17–19, 1983. For information contact: Theresa Gaffney, RN, Beth Israel Hospital, Rabb 322, 330 Brookline Avenue, Boston, MA 02215. Telephone: (617) 735-4228.

MINNESOTA

ENT for Primary Care Physicians. November 6, 1983. For information contact: Postgraduate Courses, Mayo Clinic, Mayo Foundation, Rochester, MN 55905. Clinical Reviews. November 7–9, 1983. For information contact: Postgraduate Courses, Mayo Clinic, Mayo Foundation, Rochester, MN 55905.

NORTH CAROLINA

Susan C. Dees Symposium on **Allergy & Immunology.** November 4–6, 1983. For information contact: Mary Fogarty, Duke University Medical Center. Telephone: (414) 272-6071.

NEW JERSEY

Third Annual Pediatric Novemberfest. November 4–5, 1983. For information contact: Temple University School of Medicine, 3400 North Broad St., Philadelphia, PA 19140. Telephone: (215) 221-4787.

Clinical Challenge in Geriatric Medicine. November 9, 1983. For information contact: Cal Heitzmann, New Jersey

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TEXAS

The Sixth Annual San Antonio Breast Cancer Symposium. November 4–5, 1983. For information contact: Terri McDaniel, RN, Cancer Therapy & Research Center, 4450 Medical Drive, San Antonio, TX 78229.

Newer Perspectives in Human Lymphoma. November 9–12, 1983. For information contact: Office of Conference Services, U. of Texas M.D. Anderson Hospital and Tumor Institute. Telephone: (713) 792-2222.

VIRGINIA

American-College of Toxicology—Fourth Annual Meeting. November 30–December 2, 1983. For information contact: Alexandra Ventura, American College of Toxicology, 9650 Rockville Pike, Bethesda, MD 20814. Telephone: (301) 530-0033.

WASHINGTON, DC

First World Congress of **Gynecologic Endoscopy** and Twelfth Annual Meeting International Congress on Gynecologic Endoscopy and Microsurgery. November 15–20, 1983. For information contact: Jordan M. Phillips, MD. Telephone: (213) 862-8181.

AROUND THE WORLD

ARUBA

Second International Symposium on Applied Physiology in Critical Care and Anaesthesia with Emphasis on Children; **"Care of the Child"** Symposium for Respiratory Therapists and Nurses. November 28–December 3, 1983. For information contact: Source Institute, P.O. Box 6106, Bridgewater, NJ 08807. Telephone: (201) 231-0123.

CANADA

Refresher Course for Family Physicians. November 16–18, 1983. For information contact: Claire Diano, Post Graduate Board, Royal Victoria Hospital, 687 W. Pine Ave., Montreal H3A1A1, Canada.

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DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules.

CLINICAL PHARMACOLOGY. INDERAL is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL tablets The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.

The mechanism of the antihypertensive effect of INDERAL has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta-blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain

The mechanism of the antimigraine effect of propranolol has not been established Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable

INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary

CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL

WARNINGS. CARDIAC FAILURE. Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible)

> IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)— PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA. Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker In one case this resulted after an initial dose of 5 mg propranolol

PRECAUTIONS. General. Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease. elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman

Pediatric Use: Safety and effectiveness in children have not been established

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy

Cardiovascular: bradycardia, congestive heart failure; intensification of AV block, hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System. lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to catatonia, visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic. pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura

Auto-Immune. In extremely rare instances, systemic lupus erythematosus has been reported

Miscellaneous alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval

HYPERTENSION—*Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved The usual maintenance dosage is 120 to 160 mg once daily In some instances a dosage of 640 mg may be required The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks

ANGINA PECTORIS—*Dosage must be individualized* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—*Dosage must be individualized* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily.

PEDIATRIC DOSAGE — At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use

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MISCELLANEOUS—CONT'D

PROFESSIONAL CONDUCT EXPERT. Robert S. Asher, J.D., M.P.A., in health, former Director Professional Conduct, N.Y.S. Board of Regents, now in private legal practice, 15 years health law experience concentrating on professional practice, representation before government agencies on Disciplinary, Licensure, Narcotic Control, Medicaid, Medicare or Third-Party Reimbursement matters and professional business practice. Robert S. Asher, Esq., 110 E. 42nd Street, NYC. (212) 697-2950 or evenings (914) 723-0799.

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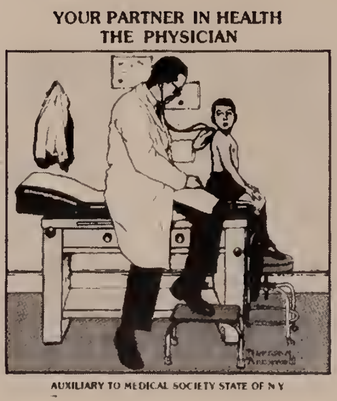

The stamp has been created by the Auxiliary to MSSNY as one way of promoting a positive image of physicians. The 4-color stamp, shown here in full size, was made from a Norman Rockwell drawing. Physicians are urged to use it in their correspondence. Stamps are .03¢ each. Check is payable to Auxiliary to MSSNY. Mail to: Mrs. Ezra A. Wolff, 70 East Gate, Manhasset, N.Y. 11030.

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Age	1983	1984
45	$18,197	$26,778
50	18,702	36,206
55	15,889	35,631
60	11,335	34,865
65	8,270	33,837
70	7,325	32,487

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Age	1983	1984
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DECEMBER 1983 • Volume 83, Number 13
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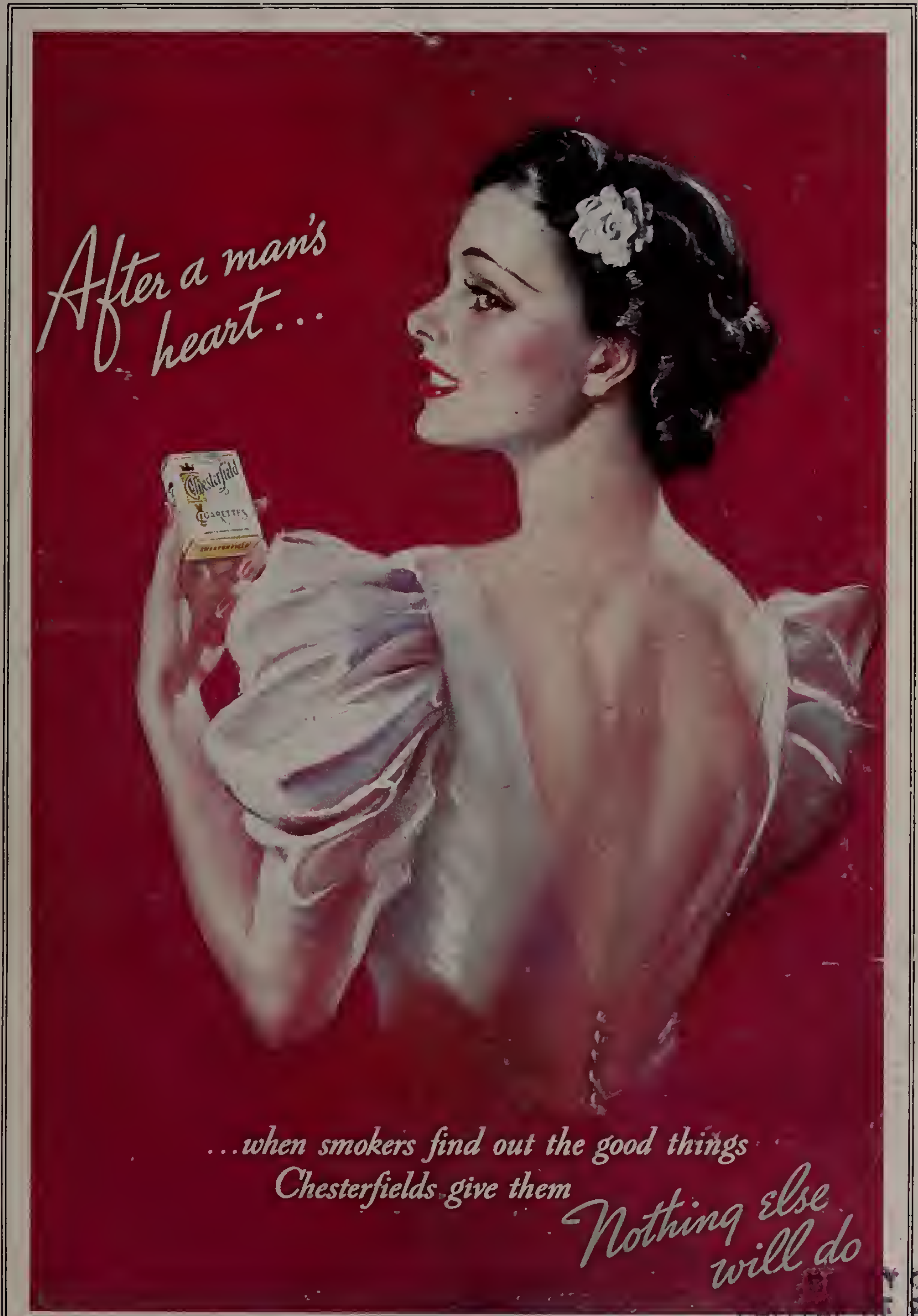
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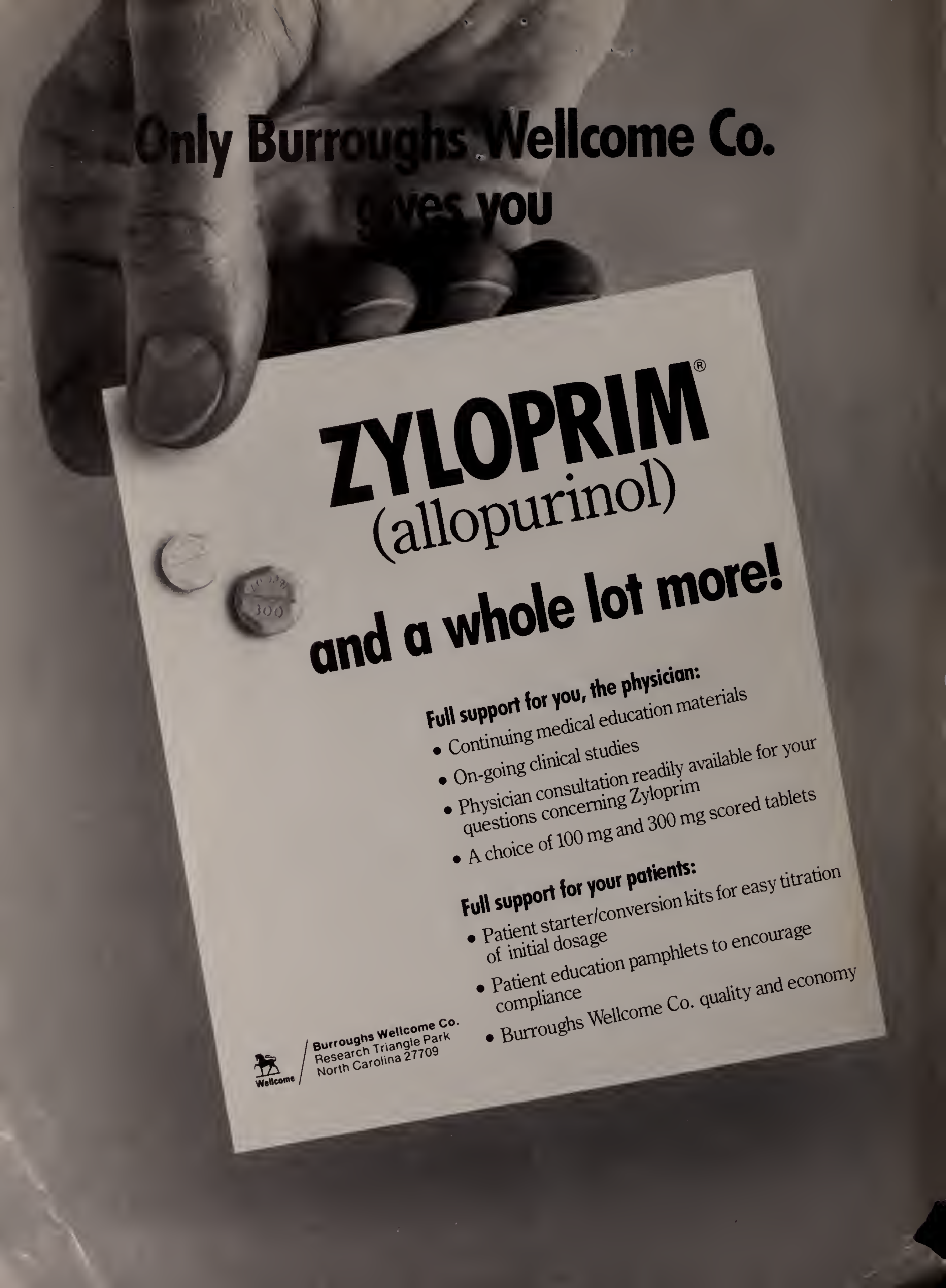

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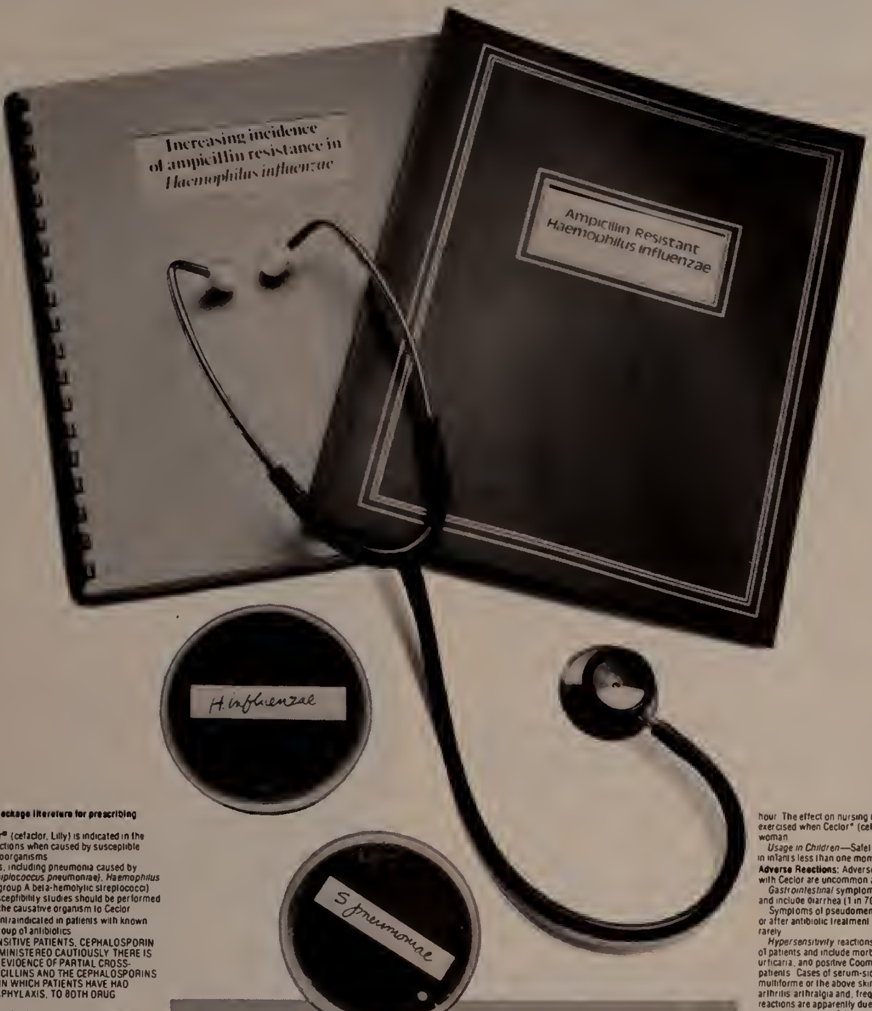
An added complication...
in the treatment of bacterial bronchitis*


Increasing incidence of ampicillin resistance in Haemophilus influenzae
Ampicillin Resistant Haemophilus influenzae
H. influenzae
S. pneumoniae

Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

Ceclor®
cefaclor

Pulvules®, 250 and 500 mg

Brief Summary. Consult the package literature for prescribing information.

Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms.

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions*—If an allergic reaction to Ceclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy—Pregnancy Category B—Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers—Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor® (cefaclor, Lilly) is administered to a nursing woman.

Usage in Children—Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations of SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

(061782R)

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*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.[8]

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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1. Antimicrob. Agents Chemother., *8*:91, 1975.
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5. Current Chemotherapy (edited by W. Siegenthaler and R. Luthy), II:880. Washington, D.C.: American Society for Microbiology, 1978.
6. Antimicrob. Agents Chemother., *13*:861, 1978.
7. Data on file, Eli Lilly and Company.
8. Principles and Practice of Infectious Diseases (edited by G. L. Mandell, R. G. Douglas, Jr., and J. E. Bennett), p. 487. New York: John Wiley & Sons, 1979.

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

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In lieu of the physicians' placement section, the *Journal* is now offering an expanded and more timely listing of Physicians Wanted, Practices Available, Positions Wanted, and Practices Wanted.

For placement of a classified advertisement, please write Ms. Alice Ann Cowley, *New York State Journal of Medicine*, 420 Lakeville Road, Lake Success, N.Y. 11042 or call (516) 488-6100, extension 301.

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GENERAL INTERNIST—FAMILY PHYSICIAN: ASSOCIATE wanted leading to partnership to replace retiring partner. Private middle-class internal medicine and family medicine practice, south shore Nassau County. Contact: Howard Grill, M.D., 121 South Ocean Ave., Freeport, N.Y. 11520. (516) 379-5005.

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ABIM CERTIFIED with subspecialty in gastroenterology/cardiology, preferrably certified to join medical group practice in South Shore Long Island, New York. Send resume to P.O. Box 504, Cedarhurst, N.Y. 11516.

References:
1. Stone PH, Turi ZG, Muller JE: Efficacy of nifedipine therapy for retractory angina pectoris. *Am Heart J* 104:672-681, September 1982.
2. Antman E, Muller J, Goldberg S, et al: Nifedipine therapy for coronary-artery spasm: Experience in 127 patients. *N Engl J Med* 302:1269-1273, June 5, 1980.

BRIEF SUMMARY
PROCARDIA* (nifedipine) **CAPSULES** For Oral Use

INDICATIONS AND USAGE: I. Vasospastic Angina: PROCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria: 1) classical pattern of angina at rest accompanied by ST segment elevation, 2) angina or coronary artery spasm provoked by ergonovine, or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography, the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PROCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e.g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm, or when angina is retractory to nitrates and/or adequate doses of beta blockers.

II. Chronic Stable Angina (Classical Effort-Associated Angina): PROCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or organic nitrates or who cannot tolerate those agents.

In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in those patients are incomplete.

Controlled studies in small numbers of patients suggest concomitant use of PROCARDIA and beta blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs. (See Warnings.)

CONTRAINDICATIONS: Known hypersensitivity reaction to PROCARDIA.

WARNINGS: Excessive Hypotension: Although in most patients, the hypotensive effect of PROCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension. These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers.

Severe hypotension and/or increased fluid volume requirements have been reported in patients receiving PROCARDIA together with a beta blocking agent who underwent coronary artery bypass surgery using high dose fentanyl anesthesia. The interaction with high dose fentanyl appears to be due to the combination of PROCARDIA and a beta blocker, but the possibility that it may occur with PROCARDIA alone, with low doses of fentanyl, in other surgical procedures, or with other narcotic analgesics cannot be ruled out. In PROCARDIA treated patients where surgery using high dose fentanyl anesthesia is contemplated, the physician should be aware of these potential problems and, if the patient's condition permits, sufficient time (at least 36 hours) should be allowed for PROCARDIA to be washed out of the body prior to surgery.

Increased Angina: Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PROCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Beta Blocker Withdrawal: Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines. Initiation of PROCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PROCARDIA initiation. It is important to taper beta blockers if possible, rather than stopping them abruptly before beginning PROCARDIA.

Congestive Heart Failure: Rarely, patients, usually receiving a beta blocker, have developed heart failure after beginning PROCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event.

PRECAUTIONS: General: Hypotension: Because PROCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PROCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. (See Warnings.)

Peripheral edema: Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PROCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy. With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Drug Interactions: Beta-adrenergic blocking agents: (See Indications and Warnings.) Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PROCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina.

Long-acting nitrates: PROCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Digitalis: Administration of PROCARDIA with digoxin increased digoxin levels in nine of twelve normal volunteers. The average increase was 45%. Another investigator found no increase in digoxin levels in thirteen patients with coronary artery disease. In an uncontrolled study of over two hundred patients with congestive heart failure during which digoxin blood levels were not measured, digitalis toxicity was not observed. Since there have been isolated reports of patients with elevated digoxin levels, it is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing PROCARDIA to avoid possible over- or under-digitalization.

Carcinogenesis, mutagenesis, impairment of fertility: When given to rats prior to mating, nifedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose.

Pregnancy: Category C. Please see full prescribing information with reference to teratogenicity in rats, embryotoxicity in rats, mice and rabbits, and abnormalities in monkeys.

ADVERSE REACTIONS: The most common adverse events include dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%. Syncopal episodes did not recur with reduction in the dose of PROCARDIA or concomitant antianginal medication. Additionally, the following have been reported: muscle cramps, nervousness, dyspnea, nasal and chest congestion, diarrhea, constipation, inflammation, joint stiffness, shakiness, sleep disturbances, blurred vision, difficulties in balance, dermatitis, pruritus, urticaria, fever, sweating, chills, and sexual difficulties. Very rarely, introduction of PROCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related. Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

Laboratory Tests: Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CPK, LDH, SGOT, and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nifedipine therapy. The relationship to PROCARDIA therapy is uncertain. These laboratory abnormalities have rarely been associated with clinical symptoms. Cholestasis, possibly due to PROCARDIA therapy, has been reported twice in the extensive world literature.

HOW SUPPLIED: Each orange, soft gelatin PROCARDIA CAPSULE contains 10 mg of nifedipine. PROCARDIA CAPSULES are supplied in bottles of 100 (NDC 0069-2600-66), 300 (NDC 0069-2600-72), and unit dose (10x10) (NDC 0069-2600-41). The capsules should be protected from light and moisture and stored at controlled room temperature 59° to 77°F (15° to 25°C) in the manufacturer's original container.

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"I can do things that I couldn't do for 3 yrs. including joining the human race again."

Quotes from an unsolicited letter received by Pfizer from an angina patient. While this patient's experience is representative of many unsolicited comments received, not all patients will respond to Procardia nor will they all respond to the same degree.

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"My daily routine consisted of sitting in my chair trying to stay alive."

"My doctor switched me to PROCARDIA[*] *as soon as it became available. The change in my condition is remarkable."*

"I shop, cook and can plant flowers again."

"I have been able to do volunteer work...and feel needed and useful once again."

PROCARDIA can mean the return to a more normal life for your patients—having fewer anginal attacks,[1] taking fewer nitroglycerin tablets,[2] doing more, and being more productive once again.

Side effects are usually mild (most frequently reported are dizziness or lightheadedness, peripheral edema, nausea, weakness, headache and flushing, each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%).

for the varied faces of angina

PROCARDIA®

(NIFEDIPINE) *Capsules 10 mg*

*Procardia is indicated for the management of:
1) Confirmed vasospastic angina.
2) Angina where the clinical presentation suggests a possible vasospastic component.
3) Chronic stable angina without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or nitrates or who cannot tolerate these agents. In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks' duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in these patients are incomplete.

Please see PROCARDIA *brief summary on adjoining page.*

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The Physician's Sleep Glossary

Some common sleep laboratory terms

poly•som•no•graph. An instrument which simultaneously records by electrodes physiological variables during sleep—for example, brain activity (EEG), eye movements (EOG), muscle tonus (EMG) and other electrophysiological variables. These readings indicate precisely when patients fall asleep, how many wake periods they experience, the quality of sleep and the duration of sleep.

sleep la•ten•cy. The period of time measured from "lights out," or bedtime, to the commencement or onset of sleep.

wake time af•ter sleep on•set. Intervals of time spent awake between onset of sleep and the end of the sleep period. The polysomnograph registers the length and frequency of the intervals.

to•tal sleep time. The amount of time actually spent in sleeping. This is estimated by subtracting wake times from the period encompassed by the onset and the termination of sleep.[1]

REM/NREM. 1. REM, or rapid eye movement, sleep is "active"—characterized by increased metabolic rates, elevated temperature and arousal-type EEG patterns. 2. NREM, or nonrapid eye movement, sleep represents "quiet" sleep stages. There are four distinct stages of NREM sleep.[2]

re•bound in•som•nia. A statistically significant worsening of sleep compared to baseline on the nights immediately following discontinuation of sleep medication.[3]

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In numerous sleep laboratory investigations patients fell asleep sooner, slept longer and woke up less during the night[3-12] with

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The efficacy of Dalmane has been studied in over 200 clinical trials with more than 10,000 patients.[3-15] During long-term therapy, which is rarely required, periodic blood, kidney and liver function tests should be performed. Contraindicated in patients who are pregnant or hypersensitive to flurazepam.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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Management of a Patient with Dementia. Jan 4. The New York Academy of Medicine. Information: Wanda Brodzka, MD. Tel: (212) 491-8357.

Cancer in Clinical Practice—Pain in Cancer. Jan 5; **Cancer of Blood-Forming Organs.** Jan 14. Information: Clifford L. Spingarn, MD, Chairman, Committee on CME, Doctors Hospital, 170 East End Ave, NY 10028. Tel: (212) 870-9118.

Tenth Annual Arvilla Berger Lecture—New Concepts in the Genesis and Treatment of Ventricula Arrhythmias. Jan 19, Waldorf-Astoria Hotel. Information: NY Cardiological Society, 84 Grove St, New York, NY 10014. Tel: (212) 924-5346.

Urological Pathology and Radiology. Jan 11–15. Information: Director's office, The Page and William Black Postgraduate School of Medicine. The Mt Sinai Medical Center. One Gustave Levy Place, New York, NY 10029. Tel: (212) 650-6737.

Update Your Medicine. Jan 18. Information: Lila A. Wallis, MD. New York Hospital, 1300 York Ave, New York, NY 10021. Tel: (212) 737-4444.

Psychosomatic Perspective on Pregnancy. Jan 17. Lennox Hill Hospital. Information: Mrs V. Matthes, Society for Liaison Psychiatry, 542 Baldwin Ave, Baldwin, NY 11510. Tel: (516) 379-1787.

Patterns of Premenstrual Change: Cognitive and Affective Implication. Jan 18. New York University Medical Center. Information: F. Frank LeFever, PhD, Neuropsychology Laboratory, Helen Hayes Hospital, West Haverstraw, NY 10993. Tel: (914) 947-3000; evenings/weekends: (212) 666-1717.

Surgical Courses in Lens Implantation. Jan 19–21. Information: Ruth Green, Administrator, Ophthalmological Foundation of America, 345 East 46 St New York, NY 10017. Tel: (212) 986-4848.

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Priapism. Jan 4; **Chemotherapy of Non Hodgkin Lymphoma.** Jan 11; **Childhood Thrombocytopenic Purpura.** Jan 18; **Pharmacology of Antifolate Therapy.** Jan 25. Information: Division of Hematology/Oncology, Interfaith Medical Center, 555 Prospect Place, Brooklyn, NY 11238. Tel (212) 240-1211.

Anesthesia for Patients with Neurologic Disease. Jan 16; **Perfluorocarbon Blood Substitutes.** Jan 17. Information: Abraham I. Raskob, MD, Dept of Anesthesiology, SUNY Downstate Medical Center, 450 Clarkson Ave Brooklyn, NY 11203. Tel: (212) 270-1233.

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New Horizons in Radiology. Jan 23. Information: Grace Urrows, Dept of Public Interest, Montefiore Medical Center, 111 East 210 St Bronx, NY 10467. Tel: (212) 920-4011.

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Intensive Review for Family Physicians. Through Apr 1. Information: Edward H. Davis MD, Peninsula Hospital Center, 51-15 Beach Channel Drive, Far Rockaway, NY 11691. Tel: (212) 945-7100 Ext 477.

Grand Rounds–Thrombotic Disorders and Thrombolysis Update. Jan 3; **Psychiatry Grand Rounds–Therapeutic Approaches to Borderline Patients.** Jan 9; **Advances in Imaging Techniques.** Jan 10; **AIDS Update.** Jan 17; **Choosing Not to Prolong Dying.** Jan 24; **Hemodialysis and CAPD.** Jan 31. Information: Luisa T. Gonzalez, Flushing Hospital and Medical Center. Tel: (212) 670-5741.

Annual Internal Medicine Board Review Course. Jan 18 through May 23. Queens Hospital Center, "N" Building, 86-68 164th St Jamaica, NY. Information: Ann J. Boehme, Long Island Jewish-Hillside Medical Center. Tel: (212) 470-2114.

Common Occupational Lung Disorders. Jan 3; **Recent Advances in Prognosis, Determination and Treatment of Acute Myelogenous Leukemia.** Jan 3; **Medical Grand Rounds–Occupational Inhalant Diseases.** Jan 4; **Urinary Tract Infection.** Jan 4; **Occupational Lung Disease.** Jan 6; **Vaginitis.** Jan 9; **Evoked Responses in Neurology.** Jan 10; **Diet and Diabetes Mellitus.** Jan 11; **Pediatric and Adolescent Neurology.** Jan 11; **Differential Diagnosis of Headache.** Jan 10; **Gouty Arthritis.** Jan 12; **Medical Gastroenterology–Function and Physiology.** Jan 16; **Multiple Myeloma.** Jan 17; **Nephrology–Mixed Acid-Base Disorders.** Jan 17; **Pathology Findings in AIDS.** Jan 16; **Hepatitis.** Jan 18; **Decision Making in the Cardiac Care Unit. Oxygen Toxicity and the Lung.** Jan 20; **Radiology–Neuro CAT Potpourri.** Jan 23; **Pheochromocytoma.** Jan 24; **Child Abuse.** Jan 24; **Primary Care**

(*continued on page 1372*)

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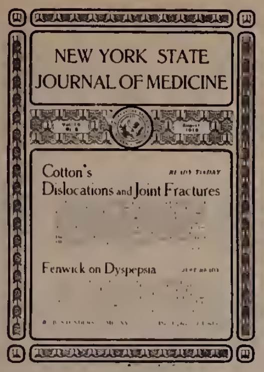

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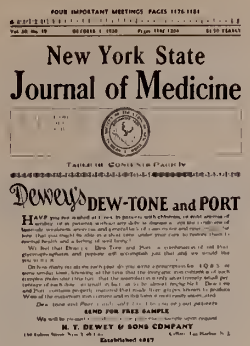

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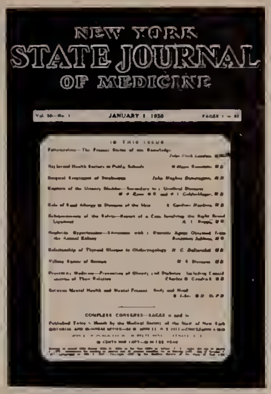

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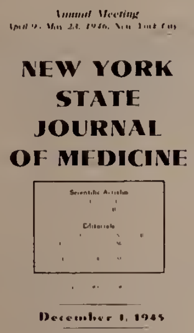

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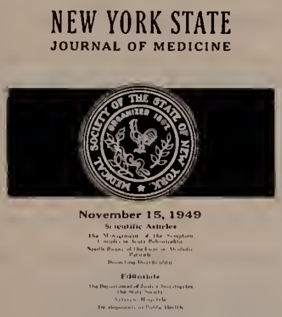

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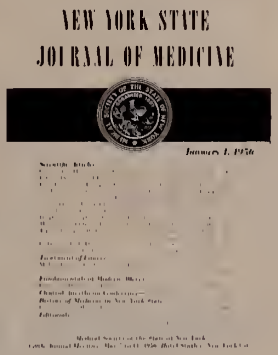

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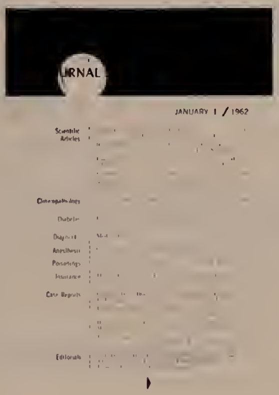

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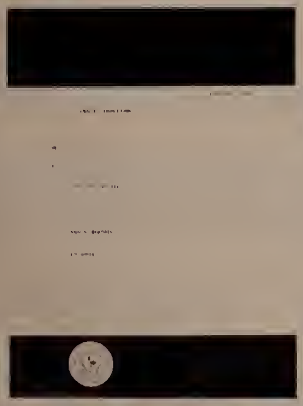

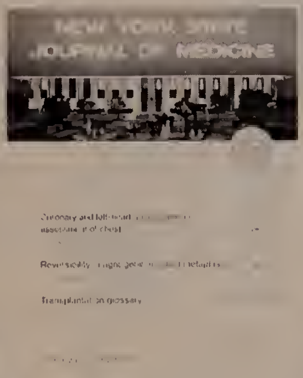

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ONCE-DAILY

INDERAL® LA

(PROPRANOLOL HCl) LONG ACTING CAPSULES

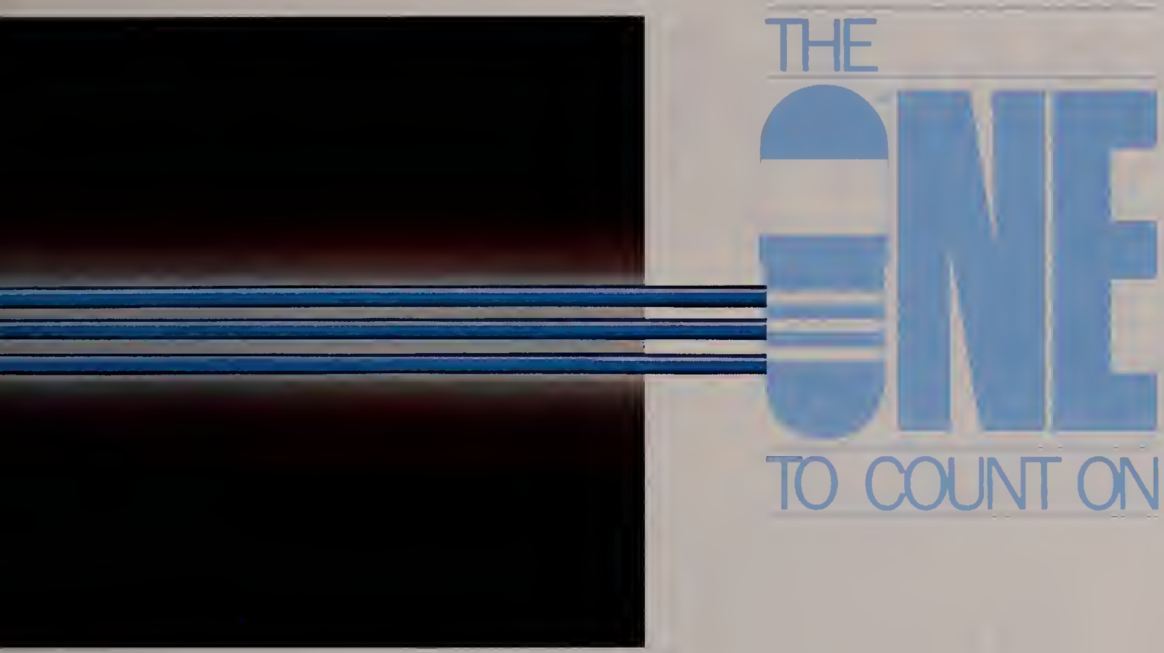
THE ONE
TO COUNT ON
FOR THE EXPERIENCE
OF INDERAL—

A unique controlled-release formulation offers effective 24-hour beta blockade

Regardless of pH or contents in the GI tract, INDERAL is diffused from small spheroids at a controlled and predictable rate.

Providing clinical results equivalent to tablets

In controlled clinical studies, a single daily dose of INDERAL LA provided the same therapeutic response as equivalent doses of conventional INDERAL tablets. While there is little correlation between plasma levels and clinical effect in hypertension and angina, blood levels achieved with INDERAL LA are usually lower than those achieved with an equivalent mg dosage of conventional INDERAL due to differences in hepatic metabolism.



WITH ONCE-DAILY DOSAGE

In hypertension, angina, and migraine

Smooth 24-hour control

Unsurpassed simplicity and convenience

Single daily dosage for enhanced patient compliance

ONCE-DAILY
INDERAL® LA
(PROPRANOLOL HCl) LONG ACTING CAPSULES

80 mg 120 mg 160 mg

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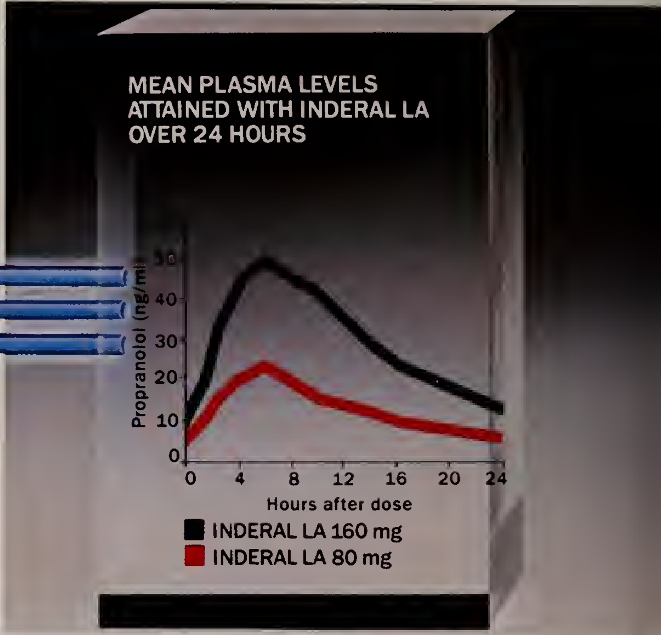
INDERAL® LA

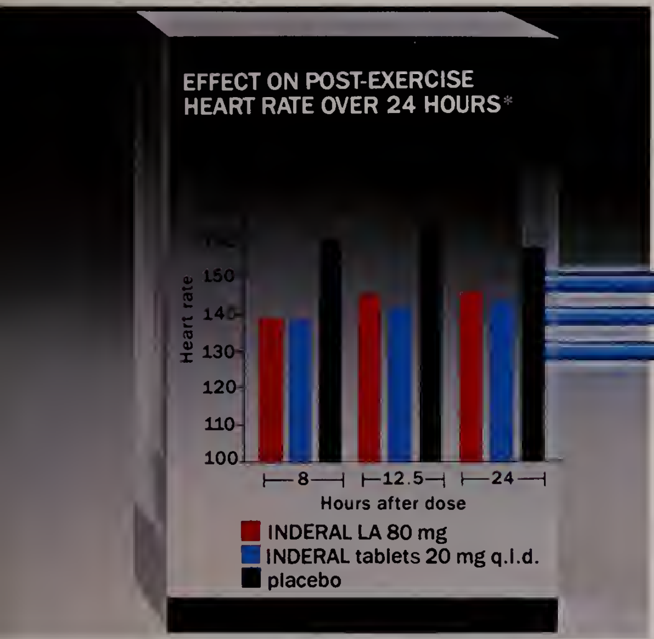
(PROPRANOLOL HCl) LONG ACTING CAPSULES



THE ONE TO COUNT ON FOR SMOOTH PLASMA LEVELS—

Sustained plasma levels

In pharmacokinetic studies, blood levels with once-daily INDERAL LA were found to be adequate to maintain sustained clinical effect throughout 24 hours. The unique controlled-release formulation of INDERAL LA minimizes differences between peak and trough plasma concentrations.



AND 24-HOUR BETA BLOCKADE

Provides therapeutic benefit throughout the day and night

In placebo-controlled trials, INDERAL LA was found to provide sustained 24-hour beta blockade as measured by decrease in heart rate, systolic blood pressure, and rate-pressure product. Patients taking once-daily INDERAL LA receive continuous protection from dose to dose–with therapeutic response equivalent to multiple daily doses of INDERAL tablets.

ONCE-DAILY

INDERAL® LA

(PROPRANOLOL HCl) LONG ACTING CAPSULES

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*INDERAL LA vs. tablets: N.S. at all hours measured.

*INDERAL LA vs. placebo: $p < .05$ at all hours measured.

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NEW

ONCE-DAILY

INDERAL® LA

(PROPRANOLOL HCl) LONG ACTING CAPSULES

THE ONE TO COUNT ON FOR INITIAL THERAPY IN HYPERTENSION

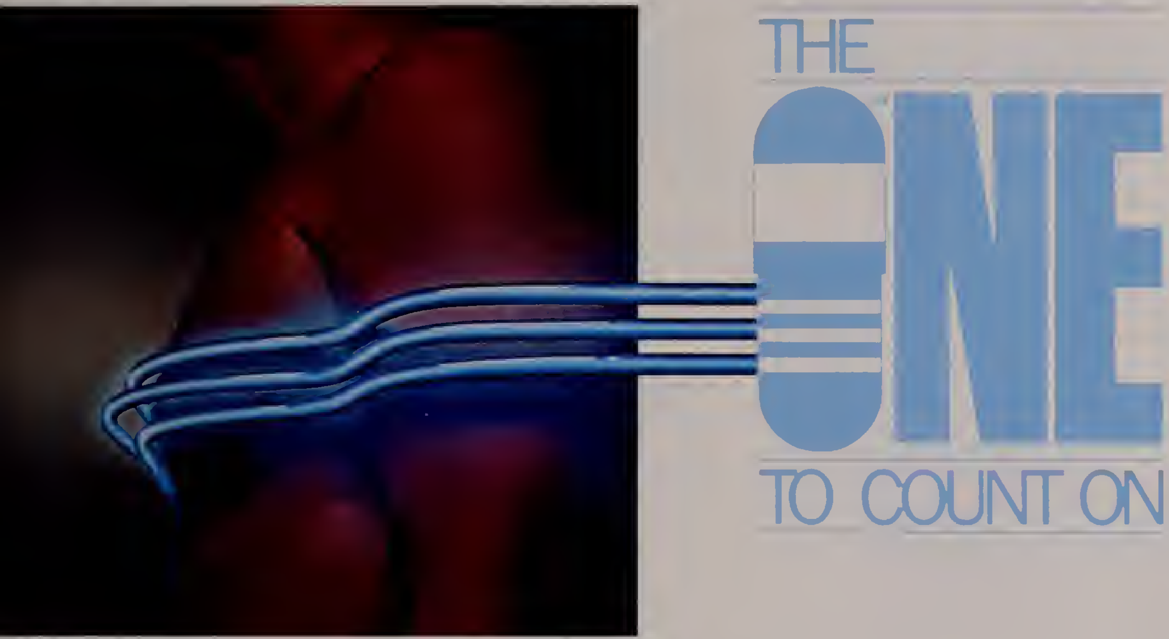
Start with 80 mg once daily

The usual initial dose is 80 mg INDERAL LA whether used alone or with a diuretic. Dosage may be increased to 120 mg or 160 mg once daily as needed to achieve additional control.

When converting patients from other beta blockers including INDERAL tablets, start with the nearest milligram equivalent of INDERAL LA once daily and evaluate clinical results to determine if dosage adjustment is necessary.

Unsurpassed convenience and simplicity

Enhanced patient compliance



AND ANGINA

Simplified core therapy begins with 80 mg once daily

Although individual patients may respond to various doses, the average optimal dose in angina pectoris is 160 mg once daily.

Compatible with other conventional antianginal therapies

The experience and protection of INDERAL

Like conventional INDERAL tablets, INDERAL LA should not be used in the presence of congestive heart failure, sinus bradycardia, heart block greater than first degree, and bronchial asthma.

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INDERAL® LA
(PROPRANOLOL HCl) LONG ACTING CAPSULES

80 mg 120 mg 160 mg

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THE ONE TO COUNT ON FOR THE EXPERIENCE OF INDERAL

NOW WITH ONCE-DAILY DOSAGE

In hypertension, angina, and migraine—start with 80 mg once daily

Smooth 24-hour control

Unsurpassed simplicity and convenience

Enhanced patient compliance

Three strengths for prescribing convenience

For arrhythmias, use conventional INDERAL® tablets

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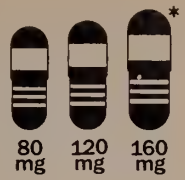

BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)*
INDERAL® LA brand of propranolol hydrochloride
(80 mg, 120 mg, 160 mg Long Acting Capsules)

DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules.

CLINICAL PHARMACOLOGY. INDERAL is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period

The mechanism of the antihypertensive effect of INDERAL has not been established Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity

In dosages greater than required for beta-blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain

The mechanism of the antimigraine effect of propranolol has not been established Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.

INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary

CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.

WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

> IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema) – PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY. The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol

PRECAUTIONS. General: Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug

Pregnancy Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus

Nursing Mothers: INDERAL is excreted in human milk Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use Safety and effectiveness in children have not been established

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy

Cardiovascular bradycardia, congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System. Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia, visual disturbances, hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval

HYPERTENSION – *Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily In some instances a dosage of 640 mg may be required The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks

ANGINA PECTORIS – *Dosage must be individualized.* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE – *Dosage must be individualized* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS – 80-160 mg INDERAL LA once daily.

PEDIATRIC DOSAGE
At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

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Ayerst®
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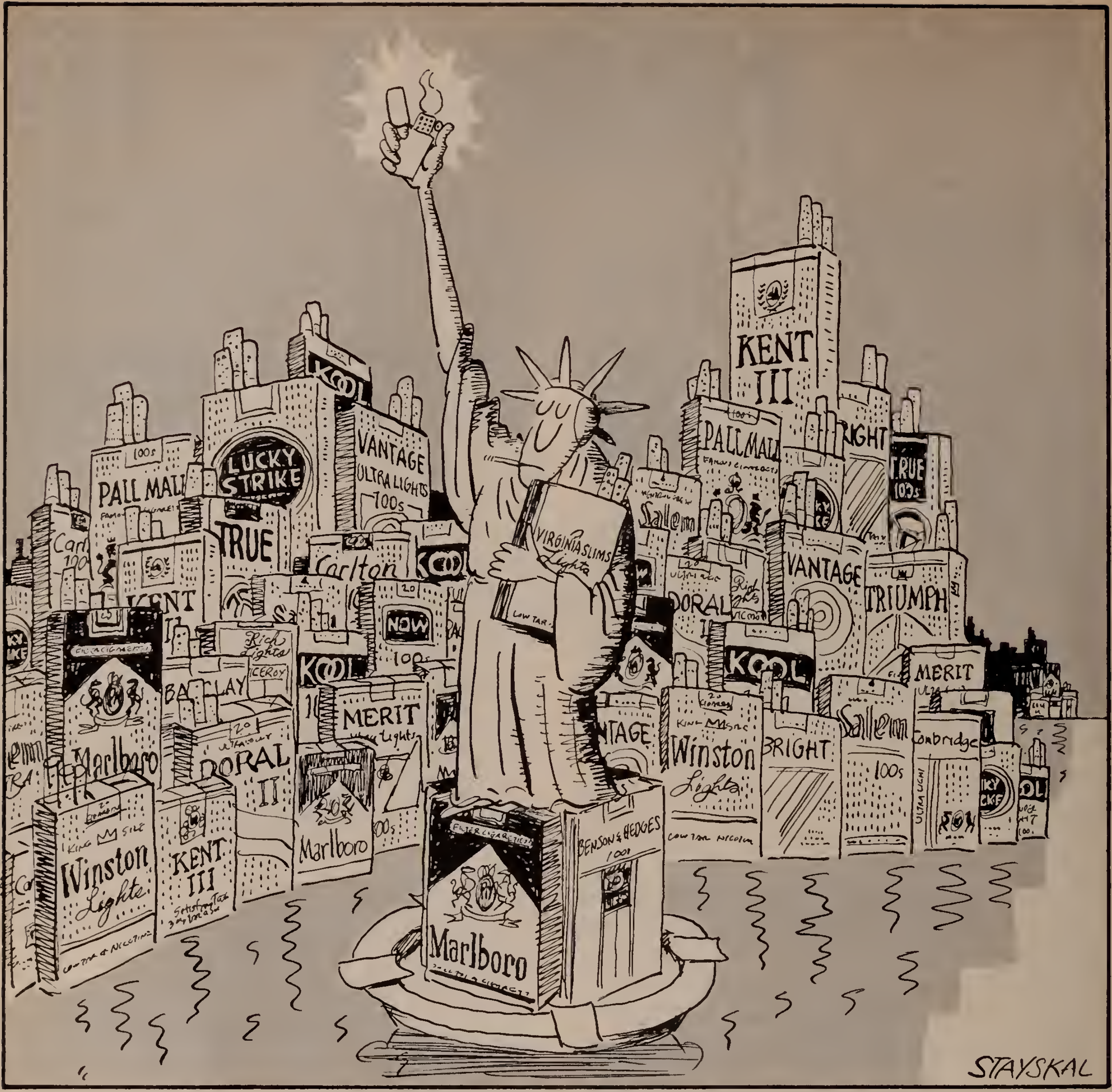

THE BIG APPALL

Wayne Stayskal, editorial cartoonist of the Chicago Tribune, *created this cityscape especially for the* New York State Journal of Medicine.

NEW YORK STATE JOURNAL OF MEDICINE

December 1983 • Volume 83, Number 13

MEDICAL SOCIETY OF THE STATE OF NEW YORK
ORGANIZED 1807

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NEW YORK STATE
JOURNAL OF MEDICINE

December 1983 • Volume 83, Number 13

EDITORIAL

Cigarette smoking and its promotion: Editorials are not enough

"One man's death is another man's living."
—IRA GERSHWIN

This issue of the *Journal* marks the 20th anniversary of the first report on smoking and health by the Surgeon General of the United States Public Health Service. Preparations for the issue began one year ago with a letter to the present Surgeon General, C. Everett Koop, MD, requesting an interview on the subject of juvenile-onset cigarette smoking. Dr Koop's encouraging reply inspired other letters to individuals around the world who have been deeply committed to ending the cigarette pandemic.

Luther Terry, MD, one of those continuously involved during the last 20 years in seeking solutions to the smoking problem, supported the idea of an entire issue on the subject of the world cigarette pandemic. In his behind-the-scenes account in this issue of the origins of the 1964 report, Dr Terry describes the meticulous attention to objectivity exercised by his advisory committee and notes the efforts by the tobacco industry to cast doubt upon the findings. He credits his predecessor, Leroy E. Burney, MD, for a courageous policy statement in 1957 that left little doubt about the relationship between cigarette smoking and cancer of the lung. Each succeeding Surgeon General has been committed to curbing the use of tobacco. This issue of the *Journal* marks the first time that all Surgeons General who have spoken or written on the hazards of smoking have contributed to a single work on the subject.

In July in Winnipeg, Canada, at the Fifth World Conference on Smoking and Health (held at four-year intervals since 1967), the *Journal* invited several principal speakers to participate in this issue. Just as Sir George Godber, former chief medical officer of England, challenged his audience in Winnipeg to ask, "How many more such conferences is the world condemned to need?" so he urges the reader of this issue to become more actively involved in efforts to counteract smoking and its promotion. There are hopeful signs, he noted, in such disparate activities as Finland's North Karelia cardiovascular disease prevention project and Australia's BUGA-UP (Billboard Utilizing Graffitists Against Unhealthy Promotions).

Of all the sessions at the five-day conference, the most ominous—and least well-attended—were those that examined current efforts of the tobacco industry to open new markets and increase the level of smoking in developing nations. Not only does this portend a health catastrophe akin to that which has occurred in industralized countries but also a more immediate ecologic threat due to the mass destruction of trees used for flue-curing of tobacco. Several papers in this issue examine the tobacco dilemma of the Third World. Mike Muller's analysis of economic, social, and agricultural aspects of the situation leaves little doubt that the sole beneficiaries in the long run are the multinational tobacco companies. Profiles of four countries—Nigeria, Malaysia, India, and Brazil—offer a depressing scenario in which local health authorities seem powerless. An economic analyst, Frederick Clairmonte, DSc, believes that the first step toward finding a solution lies in looking not at the health consequences of smoking but rather at the interconnecting boards of directors of industry and banking, which he feels create obstacles to the provision of economic disincentives for the sale and cultivation of tobacco. Moreover, although the major cigarette manufacturers have dropped the word "tobacco" from their names in most instances and have diversified (ostensibly as the result of health concerns about tobacco), cigarette sales remain the number one profit maker for these companies. Dr Clairmonte points out that the tobacco industry is becoming synonymous with the selling of alcohol, and he raises the possibility that pharmaceutical research may be influenced by considerations of the cigarette industry. Indeed, it was noted in Winnipeg, the president of one of the largest pharmaceutical companies serves on the board of a major tobacco company, and advertising accounts for many pharmaceutical products are held by advertising agencies that also promote various brands of cigarettes.

The most chilling realization of all is that the world headquarters of the cigarette industry lies not in the Deep South, but in New York City. New York is home to three of the six American cigarette manufacturers and the site of offices of two others. Nearly all of the advertising agencies that promote the products and objectives of the cigarette companies are located in New York. Most tobacco industry publications, including *The United States Tobacco Journal* (which became *The United States Tobacco and Candy Journal* earlier this year), are published in New York. The Council for Tobacco Research, which awards industry-financed grants for medical investigations, is based here.

In addition to hosting the headquarters of the three major broadcasting networks, New York is also home to one of the world's most influential newspapers. For more than a decade, several physicians, most notably George Gitlitz, MD, have challenged *The New York Times* to recognize the irony of repeated editorial accusations of financial self-interest on the part of the medical profession by acknowledging the newspaper's own role in promoting the major preventable cause of illness and avoidable medical costs. An eight-year correspondence between Dr Gitlitz and *The Times* is published in this issue, and the newspaper's rationalizations can only be read with disbelief.

At a time when newspaper editorialists across America are calling for greater accountability of physicians, it is dismaying that any editor or publisher can continue to defend the mass media's acceptance of cigarette advertising. Lest the position of a privately owned publication in a free society by misunderstood, there is no obligation to accept cigarette advertising merely because the product being sold is "legal." *The Times'* editorial opposition to teenage cigarette smoking and other forms of drug abuse is an insufficient rationalization for the newspaper's acquiescence in the promotion of cigarettes. Even the tobacco companies claim they do not approve of children smoking. The success of advertising campaigns for cigarette brands can be measured not only in terms of the continued high sales among young people in the face of all consequences but also in the continued complacency of editors and publishers who refuse to admit the connection between promoting cigarettes and the high economic and physical toll taken by smoking.

In recent years the mass media have played an increasing role both in reporting on health issues and also in determining the course of medical research. As the result of a news story on a puzzling disease, a threat to community health, or a laboratory finding, public pressure can be brought to bear on government to allocate additional funding for a line of research. If backed by the right publicity and the right people, a disease may even wind up with its own special institute at the National Institutes of Health. And whatever the disease, there is a presumption, fed by the mass media, that the key to better health lies in the research laboratory. According to the media, all carcinogens are equal—except that some carcinogens such as formaldehyde, asbestos, and dioxin (but not the carcinogens in cigarette smoke) are more equal than others. Coverage of Surgeon General Koop's statement that 170,000 Americans will die in 1983 due to smoking-related heart disease was confined to a wire service article on page D18 of *The Times*, while hearings on formaldehyde received greater attention in the main news section. The media claim that they are only reflecting the direction of modern medicine, and—publishers' and advertisers' concerns about coverage of smoking notwithstanding—they may have a point. One has only to read a fund-raising letter sent in September 1983 by a major cancer treatment center to understand how far prevention nihilism has gone:

> Last year in your home state of New York, 9,000 people died of lung cancer.
>
> Perhaps someone you know—a loved one or a friend—has lung cancer. It's quite possible, because this disease is the most common form of cancer, and one of the most difficult to control. . . .
>
> But some cancers—like lung cancer—do not respond well to existing forms of treatment. And because of this we must find new and different approaches for treating these difficult cancers. This is our goal, and we need your support to reach it.
>
> Because research efforts are so important, I want to ask you to consider making a generous gift. . . . You see, there are so many potential areas of research. So many new approaches we must try. But for that we need sufficient funds. . . .

The mass media are also reflecting the state of medical publishing in taking their cues for stories to cover. Because of the increasingly specialized nature of medical journals, smoking is considered only piecemeal, if at all, depending on the specialty. The pharmacotherapeutic objectives of controlled-circulation and single-sponsor publications have left little space for articles on preventive issues. One suspects that smoking may not be considered intellectually important enough: How often is smoking the topic of grand rounds? There may even be concern that those who propose such a conference might be carrying on a crusade—as if a campaign against an epidemic is something undignified or inappropriate. How, too, does one explain the reply of an editor of a national medical journal to a professor of public health in which a manuscript is rated "excellent, and a sure bet for a public health journal" but cannot be published in the general medical journal "because we've recently run an article on smoking"? Or the comment of another editor of a major medical journal which seldom publishes articles on the topic: "Saw your piece on cigarette advertising. Oh, I wrote that kind of thing 15 years ago." Apart from the *The Lancet*, *The British Medical Journal*, *The American Journal of Public Health*, and a few journals in respiratory diseases and preventive medicine, smoking is seldom addressed.

This issue, then, challenges preconceptions, not the least of which is that cigarette smoking is a moralistic topic. To believe this is to believe that suffering is a matter of informed consent, because an obscure and wordy warning has been placed in fine print on cigarette advertisements for the past 15 years. The key word to describe this issue is "context." Any textbook of pathology or public health can provide the grim details of the damage due to smoking. This issue attempts to place the subject in a variety of contexts, some of which most physicians may not have considered in depth—especially the man-in-the-street context of advertising. Medical training is geared almost exclusively to individual treatment and diagnosis. Very little of this issue is directed toward the cessation of smoking and the plethora of stop-smoking gimmicks, none of which has been shown to be as effective as the words and compassion of the physician himself or herself.

The intent of this issue is go beyond the posters, pamphlets, and palaver to the realm of primary prevention of the three million adolescents who take up smoking every year in this country. The term "peer pressure" is invoked in hand-wringing fashion to explain the seemingly insoluble dilemma of teenage self-destructiveness, while the *billions* of dollars spent on cigarette and alcohol advertising each year in the United States is seldom considered as the neglected cornerstone of drug abuse. Denial of our national drug abuse problem has become a cliché; but what is there to say when the major nationally televised program on adolescent drug abuse, "The Chemical People," contained not a single mention of smoking or of advertising for alcohol and cigarettes? (This in spite of a report issued earlier this year by the director of the National Institute on Drug Abuse, William Pollin, MD, indicting cigarette smoking as America's leading form of drug dependence.)

Because labels such as "antismoking," "smoker," "nonsmoker," "quitter," and "addict" may well have hampered a dispassionate analysis of the smoking problem on both individual and societal levels, contributors to this issue were encouraged to challenge the conventional vocabulary of smoking. Insofar as the average physician is concerned, smoking cessation has been regarded largely—if regarded at all—as a frustrating, futile, or hit-or-miss matter with little scientific basis. Not one of the nearly 9,000 continuing medical education courses offered in the United States in 1983 was devoted to scrutiny of methods for the treatment of the problem recognized by the World Health Organization and the Centers for Disease Control as the single most preventable cause of poor health in the world. One of the objectives of this issue is to encourage physicians to realize that not all of the onus for solving the smoking pandemic lies with themselves or with researchers or with governments—or, for that matter, with patients. But it is imperative that physicians overcome the misapprehension that patients "have heard it all before," for most information about smoking perceived on a day-to-day basis by the public and the medical profession alike has been put to them in the form of $1.5 billion worth of advertising images each year. As W. R. Rickert, PHD, implies in this issue, by advertising cigarettes as "low tar" (low poison? fewer carcinogen-containing compounds per puff?), the tobacco industry has become our leading health educator. At the very least—whether through the introduction of "toasting" in the 1920s, filters in the 1950s, or less "tar" in the 1970s, the industry has succeeded in allaying the health concerns about smoking on the part of millions of Americans and in undermining educational efforts—unimaginative, off-the-mark, and poorly promoted though most such campaigns may be—about the undeniable and irredeemably harmful consequences of cigarette smoking. The motto of the tobacco industry could well be "ubiquity, propinquity, iniquity," for it is by posting its cigarette brand images everywhere, by juxtaposing the images to enjoyable and healthful activities such as sport, and by reinforcing a sinful, rebellious idea of smoking that it keeps sales high.

Since the mass media will not report on the subject of cigarette smoking and its promotion to the extent that they cover even the rarest of diseases, physicians must choose whether to adapt to the mass media's concept of health and disease or to act on the basis of their own knowledge. Is it not our duty to work as hard to end the world cigarette pandemic as those who are paid to glorify the image of smoking?

ALAN BLUM, MD
Editor

Health versus greed

GEORGE E. GODBER, DM

The World Conferences on Smoking and Health began in New York at the instance of the American Cancer Society 16 years ago and have continued at four-year intervals since. The conferences have been unusual in their provenance because none has been promoted by a government or a national medical organization. We have come together from many different backgrounds and with various support because we know what harm smoking does and want to see that harm reduced. In 1967 some of those attending may have thought there was still a case to prove, although I recall that even the television technicians had put out their cigarettes before Robert Kennedy was half way through his remarkable speech at the opening session. I do not imagine there is anyone attending the Fifth World Conference—even the odd agent from the industry—who still doubts that smoking is the largest single avoidable cause of ill health and premature death in the industrialized world today. Our problem is not whether but how we should persuade smokers to stop and others to refrain from starting. We all know that it is the active efforts of the promoters of smoking that has made it so difficult for the promoters of health.

Yet 1967 is only half way back to the time when we had the first unequivocal proof of the causal relationship of smoking to lung cancer. I remember that Alton Ochsner, MD who had suggested that there might be such a link 30 years earlier, was at that first conference. Richard Doll and Austin Bradford Hill in Britain and Ernst Wynder and Evarts Graham in the United States first gave us proof in 1950. By 1967 Doll and Hill had not only shown that smoking causes far more illness and death from other diseases than from cancer, but also that stopping smoking may reverse the effect. Hammond and Horn had reported on a far larger study in the United States. Hill, Hammond, and Horn were all at that first conference, which was chaired by Luther Terry. (Graham, who had smoked heavily until his own research convinced him otherwise, died of lung cancer.)

The epidemic of lung cancer in Great Britain alone has cost some three quarters of a million lives since we have known its origin and how to stop it. Thirty years ago, that epidemic was only half way to its present peak. Future generations will be aghast that so little had been done to stop it in the first decade or indeed by the time of the first conference. The most that health ministries were doing in the 1950s was some occasional propaganda which had little and transitory effect on most people, although the medical profession itself responded. The industry was all too alert to the threat to its market and rapidly increased its sales promotion. We were content to tell the public on a take-it-or-leave-it basis. Indeed, that is just the line some politicians take now because they maintain that people must be free to choose—and so they must, *provided it is an informed choice.* That choice is hopelessly prejudiced if it has to be made against the constant pressure of intensive sales promotion, always presenting smoking as a sociable, attractive activity of normal men and women in pleasant circumstances. By now we have come to realize that smoking is essentially a form of addiction, which is cleverly reinforced by sales promotion.

Two events of the 1960s changed public attitudes. In 1962 the Royal College of Physicians of London published their report on smoking and health, the result of a three-year study. That report had a tremendous impact and it sold even more copies in North America than in Britain. After the 1964 report of the United States Surgeon General there could no longer be any doubt of the enormity of smoking as a man-made threat to health. Since then the literature filling out information on every detail of the smoking menace has multiplied until it fills a modest book from the Technical Information Center of the US Office on Smoking and Health every two months. There have been yearly reports from the Surgeon General since 1964, two more reports from the Royal College, and reports in most industrialized countries from government or other committees, all presenting the same broad conclusions. Smoking is the largest single avoidable threat to health in the industrialized world today and the cigarette the most lethal instrument devised by man for peacetime use.

We are left with the problem, not so much of deciding on the right action to take, but how to ensure it is taken. Looking back over 33 years, one can recognize three phases in the campaign, each lasting roughly a decade. First there was the period of proving the case, ending with the first major reports of 1962 and 1964. Second was the period of seeking ways of convincing the public and governments. Third came the period of more intensive study of the factors which make escape from cigarette dependence so difficult. It is probable that in the first phase the tobacco interests simply treated the health campaign as a scare which would

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Dr Godber is former Chief Medical Officer of England and Chairman of the First and Second WHO Expert Committees on Smoking.

Based on a presentation delivered at the Fifth World Conference on Smoking and Health, Winnipeg, Canada, July 11, 1983.

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die down. In the second phase they took a placating action which they implied would minimize the risk (a risk they have never acknowledged in the first place) of trying to make smoking materials less carcinogenic. That theory blown, in the third phase they have mounted a two-pronged promotional effort aimed at maintaining lucrative sales—namely, visible corporate philanthropy to cultural and sports organizations on the one hand and a barrage of sophisticated advertising imagery on the other—and the notion that the regrettable harm to health can be made to appear socially acceptable in return for the pleasure tobacco provides.

There can be no doubt about the need for an international approach. Work in one country has proved invaluable to others. This, after all, is how the tobacco industry operates. In 1975, the first Expert Committee of the World Health Organization (WHO) before the Third World Conference in New York proposed national comprehensive campaigns, which the conference endorsed and commended to all health ministers. Four years later a second Expert Committee reviewed and extended the measures proposed in a report, *Controlling the Smoking Epidemic*, and expressed great concern about the uninhibited way in which smoking was being promoted in less-developed countries. The third Expert Committee has been concerned with action leading to economic and agricultural changes.

Sixteen years ago I wondered just how useful a world conference could be. Now as I enter my membership of this, the fifth, I have no doubt that the series has helped to give the campaign against smoking an impetus it would not otherwise have had. But how many more conferences is the world condemned to need? We have made some real gains in reducing mortality in younger men, but women are now exposed much more to the damaging effects of smoking than they were 30 years ago and the result in rising cancer deaths is already apparent. Moreover, the danger to the fetus from smoking by pregnant women is now known and all too little has been done to reduce it. In the 16 years since the first conference, the people of our countries must have lost many millions of years of potential working lives because we have not succeeded to the extent we should have done. In recent years there has been a mounting threat to the less developed, less healthy, and less affluent countries of the world, promoted by the multinational conglomerates whose advances we are slowly containing at home. It is this last development that fully exposes the main support of the continued prevalence of smoking disease and explains the assignment given to WHO's third Expert Committee.

The commercial interests show no scruple about promoting a product with the devastating consequences we know all too well and of which they cannot be ignorant. The developed countries have begun to assert some control over promotion of tobacco—limited and ambivalent as governmental action has been—and the industry has used every endeavor to circumvent control, even in countries like Norway where forceful laws have been enacted. Politicians in some countries, like my own, have been so misguided as to accept inept and futile voluntary agreements about direct promotion which will never be effective so long as the indirect and supposedly innocent methods such as promotion of the arts and, most ironic of all, sports are left open. Those agreements would not be concluded if the commercial interests really believed that the result would be the end of their commerce.

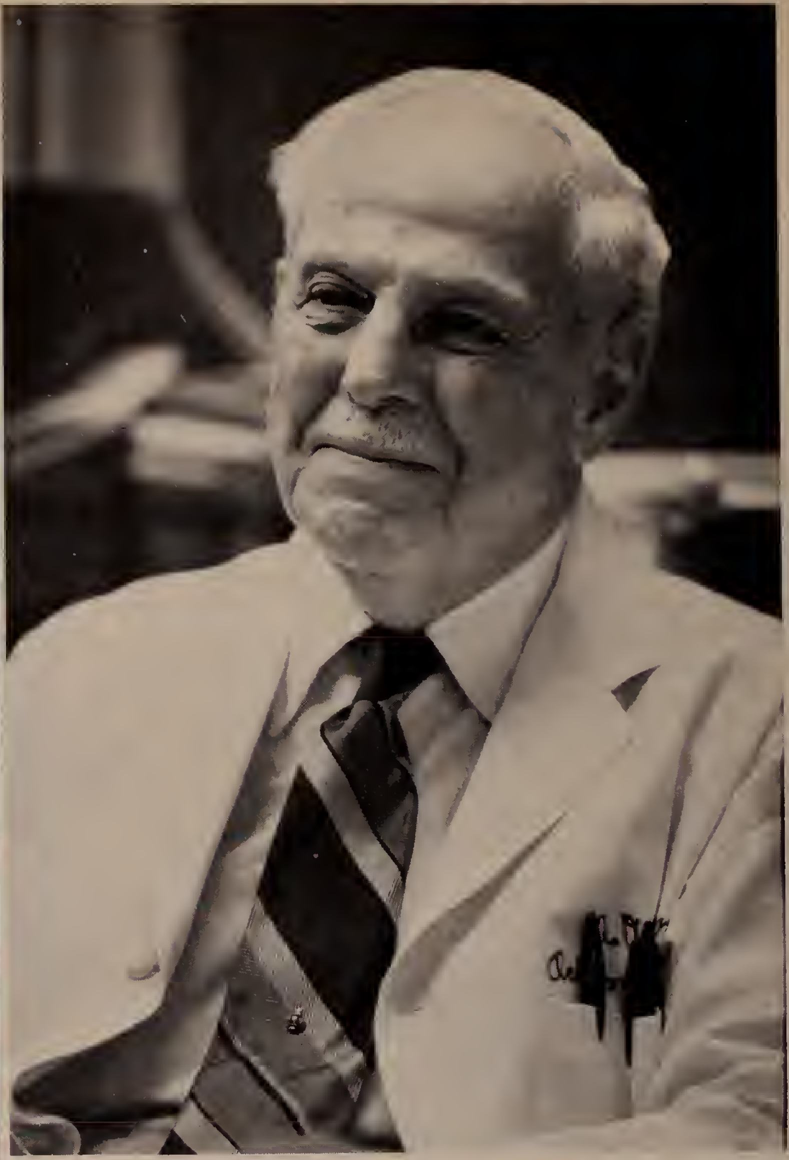
Do governments have a secret reservation of their own that they can seem to fight for our cause so long as they do not actually win?

How many more times must we restate the formula? It has been set out by the last two conferences and the WHO Expert Committees and now again by the Ontario Task Force, each time with a wealth of added detail. But the essentials remain the same. Broadly, they are: Stop commercial promotion of tobacco products; limit smoking in public places; increase the cost of smoking by progressive taxation on tobacco products; and above all, improve education for health, especially of children. Let us stop deceiving ourselves by half measures and make a serious attempt to realize the target Sweden once set itself of a nonsmoking generation, and make it soon. Let no government hide behind the excuses that workers in the tobacco industry—producers, processors or sales force—will lose their incomes, or that taxes will have to be levied in different ways. There are other crops and other industries that might be far more beneficial to those people. We do not ask for laws against smokers, but against the promoters and reinforcers of tobacco addiction. If we in the industrialized world are beginning to win—and do not doubt that we will win—then it is the manifest duty of governments and international agencies to complete that victory within years, not decades, for all countries. Let that be our clear message to them.

HOLOCAUST

Every year cigarettes kill more Americans than were killed in World War I, the Korean War, and Vietnam combined; nearly as many as died in battle in World War II. Each year cigarettes kill five times more Americans than do traffic accidents. Lung cancer alone kills as many as die on the road. The cigarette industry is peddling a deadly weapon. It is dealing in people's lives for financial gain.

—from an address by the late United States Senator
Robert F. Kennedy of New York at the First World
Conference on Smoking and Health, New York, NY
September 11, 1967



ALTON OCHSNER, MD

Alton Ochsner, MD, 1896–1981

He cleared the air

"In the early '50s, Alton Ochsner was coming to give a lecture to our medical school class at the University of Michigan. We thought we'd play the wise guys. So as soon as he was introduced, we all lit up cigarettes. But Ochsner never batted an eyelash. On the contrary, within only a few minutes of listening to him and seeing his vivid slides and x-rays of patients who died from lung cancer, not a soul was still smoking. And I doubt very many of us ever smoked again after that. I know I didn't."

The story was told by a physician who had just heard Dr. Ochsner, at age 84, deliver one of the major scientific addresses at the annual meeting of the American Academy of Family Physicians in 1980; the listener had found his presentation on the same topic as dynamic and compelling as it was 30 years before. Even if Ochsner, who died on September 24, 1981, had not been among the first physicians, in 1936, to make the connection between smoking and lung cancer, he would still be remembered as one of the foremost thoracic surgeons and medical teachers in history. Named chairman of surgery at Tulane University at the age of 30, he went on to found a leading medical center, the Ochsner Foundation Hospital (named after him as a sign of admiration by his physician-co-founders).

Ochsner's persistent belief that cigarette smoking was the principal cause of the growing epidemic of lung cancer—a theory he publicized throughout the 1940s in the face of ridicule and vituperative attacks even from within the medical profession—symbolized his energetic drive to improve public health. In 1919, lung cancer was such a rare disease that Ochsner's entire junior medical school class at Washington University's Barnes Hospital was asked to witness the autopsy of a man who had died from it. The professor, George Dock, MD, believed no one in the class would ever again see another such case. Seventeen years later, after having been a surgeon for more than a decade, Ochsner did see his next case of lung cancer—nine cases, in fact, in a period of just six months. Because all the patients were men who had taken up the newly mass-advertised practice of smoking while serving as soldiers in World War I, he had the temerity to suggest that cigarette smoking was responsible.

By 1952 he and his colleagues Paul DeCamp, MD, Michael DeBakey, MD, and C. J. Ray, MD, could write in *JAMA* (148:691-697), "There is a distinct parallelism between the sale of cigarettes and the incidence of bronchogenic carcinoma." They accurately predicted that the death rate from lung cancer would escalate as long as smoking continued to exist and that lung cancer would be the leading cause of death from cancer. So controversial was Ochsner that prior to an appearance on "Meet the Press" in the mid-1950's, he was told he would not be permitted to mention on the air the possible causal relationship between cigarette smoking and lung cancer.

In the 1960s and 1970s, Ochsner pointed out that as tragic as is the fatality rate from lung cancer due to smoking, it pales in comparison to cigarette-related deaths from heart attack and emphysema. After the widespread publicity accorded the breast cancer experiences of the First Lady, Mrs. Betty Ford, and the wife of the Vice-president, Mrs. Happy Rockefeller, Ochsner castigated the mass media for ignoring lung cancer—a more preventable problem and soon to become a greater cause of death among women. He also criticized insurance companies, having tried for years to get them to give preferential rates to nonsmokers. "The companies' own statistics show that heavy smokers live about 8½ years less," he said, "but premiums appear to be set according to death rates for smokers. Company profits are thus boosted at the expense of nonsmokers who do not only pay extra but live longer." He surmised that insurance companies have tobacco stock in their portfolios.

Ochsner was among the first to debunk the government's $40 million research effort to develop a "safe cigarette." Whenever he was asked if filter cigarettes had any value, he would reply, "Yes, for the tobacco industry. They help sell more cigarettes."

Obituaries of Ochsner depicted him as a foe of smoking and a nemesis of the tobacco industry. It would be more accurate to describe him as a forceful advocate for good health. Although a surgeon, he preferred to speak out about measures that could prevent a need for the knife. "Even though relief of symptoms and prolongation of life can be obtained by surgery and other therapeutic measures," he wrote in *JAMA* in 1966 (196:852), "only through prevention, mainly abstinence from smoking, can one hope to attain better results in the treatment of lung cancer."

There is little on the horizon to challenge that statement.

ALAN BLUM, MD
Editor

THE SURGEONS GENERAL

Policy over politics

The first statement on smoking and health by the Surgeon General of the United States Public Health Service

L. E. BURNEY, MD

Twenty-six years ago, as Surgeon General of the Public Health Service, I issued a statement at a televised press conference that prolonged cigarette smoking was a causative factor in the etiology of lung cancer. This was the first time the Public Health Service had taken a position on this controversial subject and in fact was the first official national recognition provided to the public through the media of the relationship between cigarette consumption and the increasing incidence of lung cancer.

One does not make a decision of this importance in a vacuum. Michael Shimkin, MD, a friend and colleague in the Public Health Service at the National Cancer Institute, brought the overwhelming evidence implicating cigarette smoking to my attention; Ernst Wynder, MD, of New York City, an early investigator in this field, was also very convincing, as was Morton Levin, MD, an epidemiologist with the State of New York Department of Health working in the Roswell Park Memorial Institute.

The initial statement of 1957 was based on research conducted principally in Great Britain and the United States over many years, indicting cigarette smoking as responsible in large part for the increasing lung cancer death rate. Investigators in Great Britain, principally Doll and Hill, presented some of the earliest evidence. Their longitudinal study[1] included an analysis of over 40,000 British male physicians over 35 years of age. The age-adjusted death rate in their four-and-one-half-year study ranged from 7 per 100,000 for nonsmokers to 166 per 100,000 for heavy smokers.

One critic of this study suggested that the observed associations were spurious and the result of the interplay of various subtle and complicated biases. However, the British government accepted the causative relationship as valid and instituted public educational programs directed at reducing the prevalence of cigarette smoking.

In the United States, Hammond and Horn, supported by the American Cancer Society, were among the early investigators together with Dorn of the Public Health Service, Cornfield, Breslow, and many others.

In 1956, the American Cancer Society, American Heart Association, National Cancer Institute, and National Heart Institute organized a Study Group on Smoking and Health, which, after many conferences, issued a statement that "the sum total of scientific evidence established beyond reasonable doubt that cigarette smoking is a causative factor in the increasing incidence of human epidermoid carcinoma of the lung." [2]

In 1957, the British Medical Research Council stated that ". . . a major part of the increase [in lung cancer] is associated with tobacco smoking, particularly in the form of cigarettes" and further stated that "the relationship is one of direct cause and effect." [3]

In 1959, as a result of additional evidence, I stated in an article in the *Journal of the American Medical Association* that "the weight of evidence at present implicates smoking as the *principal* factor in the increased incidence of lung cancer." [4]

Further investigations in subsequent years substantiated both the 1957 and 1959 statements and also presented evidence implicating cigarette smoking in heart disease, emphysema, and other conditions. There were then compelling reasons for the Public Health Service to make a firm statement in 1957 on the hazards of cigarette smoking. Cancer of the lung was increasing more rapidly and causing more deaths than any other form of cancer in the adult male population. The death rate in white males had increased from 3.8 per 100,000 in 1930 to 31.0 in 1956, resulting that year in 29,000 deaths.[5]

The Public Health Service, from its origin in 1798 as the primary health agency of the national government, had a responsibility, through its Surgeon General, to inform the public and members of the health professions on all matters relating to public health problems and issues.

To comply with this responsibility and mandate, a copy of the Surgeon General's statement and supporting evidence was sent to (1) all state medical societies with the request that they forward the material to all local societies, and (2) (with the assistance of the Office of Education) all state superintendents of education to inform and assist them in the preparation of materials and teaching content of health and physical education programs in local schools.

It is one thing to make a decision, but quite another to have the freedom to implement that decision. This freedom was available to me under the Secretary of the Department of Health, Education and Welfare, Marion B. Folsom, former official of Eastman Kodak Company. When I informed him of the data and my plans to hold a press conference and issue a statement, his response was typical for

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him: this was a professional program decision for me to make, and he would support my decision.

The White House was informed and all that press secretary James Haggerty requested was a copy of the proposed press release.

One major reason the statement on cigarette smoking in 1957 caused such alarm among those in the cigarette business was the shared confidence of the public, Congress, and the mass media in the integrity and credibility of the Public Health Service.

As a courtesy to the tobacco industry, which was attempting to refute all evidence on the hazard of cigarette smoking, I sent a copy of the press release to their representative a few days prior to the conference. My courtesy was repaid by their simultaneously releasing a lengthy, harsh rebuttal to the statement. I continue to be surprised by any action of a vested interest which puts profits above human welfare.

The reaction of organized medicine was muted—and for several years after 1957. The American Medical Association (AMA) had a rather detached, arms-length attitude.

This disappointment was compounded by a highly critical editorial in 1959 by the Editor of *JAMA*,[6] John Talbott, MD, following publication of my article entitled, "Smoking and lung cancer—a statement of the Public Health Service." [4] One never questions the freedom of an editor to express his views, but in the absence of any official AMA position on the hazards of cigarette smoking and lung cancer, an editorial by the editor in the official publication of the organization could very well lead the medical profession, the public, and the media to assume that the editor was in fact expressing the unspoken position of the AMA.

This attitude appears to have changed during the last few years, and it is encouraging to observe the positive position and direct actions of physicians in informing the public and influencing the smoking habits of their patients. This issue of the *New York State Journal of Medicine* on the cigarette pandemic is an outstanding example of medical leadership and involvement—the kind of action the public wants, needs, and expects from their physicians.

Progress has occurred during these 26 years but the battle is far from won. Special economic interests and the politicians they influence still refuse to drop their membership in the Flat Earth Society and acknowledge that cigarette smoking is killing hundreds of thousands of Americans each year.

In the continuing efforts to reduce and prevent the mortality and disability from lung cancer, emphysema, heart disease, and other diseases in which cigarette smoking has a causative role, physicians have the most important role in changing the smoking habits of the public. They will not, I am sure, adopt the life style of Henry Adams who described himself (in *The Education of Henry Adams*) as follows:

> As it happened, he never got to the point of playing the game at all; he lost himself in the study of it, watching the errors of the players.[7]

I hope that this issue of the *Journal* will inspire the physicians of New York State to take the lead in this most important issue of the public's health.

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ETIOLOGY OF LUNG CANCER: PRESENT STATUS (1954)

The fact that 13 separate studies have shown the same result is strong presumptive evidence that an association exists between cigarette smoking and lung cancer, i.e., that lung cancer occurs more frequently among cigarette smokers than among nonsmokers. Indeed, one may predict that the "prospective" studies now under way will fully confirm the fact of a substantially increased risk of lung cancer among cigarette smokers . . ..

Lung cancer is a rapidly increasing cause of death in this country. In New York State it now exceeds tuberculosis in number of deaths among males.

Between 1931-1933 and 1948-1950, age-adjusted lung cancer mortality increased among males in New York State by 385 per cent, among females by 68%. Since cancer is a reportable disease in New York State, it is possible to calculate the probability of developing cancer of various sites throughout the life span. For lung cancer, within the short period between 1942-1944 and 1949-1951, this probability has more than doubled for males. At present rates of incidence, 2% of males may be expected to develop lung cancer. If the present rate of increase continues, this figure may double again within the next fifteen years.

Lung cancer is a public health problem rapidly mounting in importance. Public health authorities as well as private medical practitioners must take cognizance of the available facts regarding its occurrence and etiology.

—MORTON L. LEVIN
New York State Journal of Medicine 1954; 54:769-777.

Dr. Levin, Professor of Epidemiology, Johns Hopkins University, was Assistant Commissioner for Medical Services of the New York State Department of Health when he wrote this article.

The Surgeon General's first report on smoking and health

A challenge to the medical profession

LUTHER L. TERRY, MD

Many Americans believe that the Surgeon General's Advisory Committee report, *Smoking and Health*, of 1964 was America's first recognition of the enormous toll taken by tobacco. But in fact, it was the culmination of growing scientific concern over a period of more than 25 years. In 1928 Lombard and Doering[1] reported a relationship between smoking and health when they noted that heavy cigarette smoking was more common among patients with cancer than among controls. In 1938 Pearl[2] found that heavy smokers had a shorter life expectancy than nonsmokers. During the 1930s there were many other reports by medical scientists of smoking associated with lung cancer, chronic pulmonary disease, emphysema, and coronary artery disease.

One of the most outspoken opponents of smoking was Alton Ochsner, MD, of Tulane University. (His convictions in this regard were so strong that he would not permit any of the members of his staff to smoke. There are many stories of interns who burned their hands or ruined uniforms in an attempt to conceal their smoking.) In 1939 he and Michael DeBakey, MD, reported their observations on the association between cigarette smoking and lung cancer.

Many of the studies on smoking and health were interrupted during World War II. However, by the early 1950s several major prospective and retrospective epidemiologic studies had been published. In 1954 cigarette companies set up the Tobacco Industry Research Committee in an effort to question the increasing evidence unfavorable to their product.

A year later Surgeon General Leroy E. Burney, MD, aided the establishment by the National Cancer Institute, the National Heart Institute, the American Cancer Society, and the American Heart Association of a scientific study group to assess the problem. The group concluded that a causal relationship existed between excessive smoking and lung cancer. On July 12, 1957 Dr Burney placed the Public Health Service on record as accepting the cause-and-effect relationship between smoking and lung cancer. Cornfield et al[3] analyzed the scientific data and confirmed the causal relationship. In November 1959 Dr Burney published an article in *JAMA*[4] confirming the position of the Public Health Service on the issue. Still, the subject received little scientific and public attention.

On June 1, 1961 the presidents of the American Cancer Society, the American Heart Association, the National Tuberculosis Association, and the American Public Health Association submitted a joint letter to President Kennedy, pointing out the increasing evidence of the health hazards of smoking and urging the President to establish a commission to study the tobacco problem.

On January 4, 1962 I met with representatives of these organizations and then submitted to the Secretary of Health, Education and Welfare, Abraham A. Ribicoff, a formal proposal for the establishment of an Advisory Committee on Smoking and Health to report to the Surgeon General. At that time I reported on the mounting evidence of the adverse health effects of tobacco smoking, a request from the Federal Trade Commission for guidance on labeling and advertising of tobacco products, a resolution introduced in the Congress by Senator Maureen Neuberger urging a presidential commission on the subject, and a recent report by the Royal College of Physicians of London concluding that "cigarette smoking is a cause of lung cancer and bronchitis, and probably contributes to the development of coronary heart disease."

After discussions between the staffs of the White House and HEW, President Kennedy announced that he was assigning the responsibility of a study on smoking and health to the Surgeon General. At the same time, I was given the personal assurance of the President that he expected an expert scientific review of the subject and that he would not allow any political interference with the study. I am happy to report that this commitment was rigidly observed until the report was published.

On July 27, 1962 my staff and I met with representatives of the various medical associations and volunteer organizations, the Tobacco Institute, the Food and Drug Administration, the Federal Trade Commission, the Departments of Agriculture and Commerce, the Federal Communications Commission, and the President's Office of Science and Technology. These representatives were given a list of 150 eminent biomedical scientists (none of whom had taken a major public position on the subject of smoking and health) from which we expected to appoint a committee of about ten members. The attendees were given the opportunity to delete from the list anyone to whom they objected, and they were not required to give reasons for their objection.

Ten individuals were picked from various areas of the medical sciences, and I personally invited each of them to serve. Every one of the first ten selected agreed to serve. This assured me that these scientists were convinced of the importance of the subject and of the complete support and confidence of the Public Health Service.

The committee first met on November 9, 1962, at which time it was agreed that all of the methodology and conclusions of the report would be kept secret until publication. Although I was the nominal chairman of the committee, it

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was agreed that I would not participate in any of the deliberations or conclusions of the group. All of the members of the committee and the supporting staff were pledged to secrecy, a pledge which was rigidly observed.

In the next 14 months the members of the committee worked at the National Library of Medicine and at their home institutions. The committee sought research data and other relevant material from all interested organizations and persons, including the tobacco industry. I had instructed members of my staff not to acquaint me with the work or conclusions of the committee. Thus, I could not be pressured into hinting to the press, in spite of daily inquiries, the conclusions of the committee. When the 387-page report was completed, it was printed with strict security by the US Government Printing Office. I did not see the report until it was in final print, and I did not participate in the preparation of any of the report.

The report was released on Saturday, January 11, 1964 at a press conference held in the conference room of the State Department, which was chosen because of its communications facilities. Congress was not in session, and we were assured of the full attention of the press.

All those attending the press conference were required to remain for the entire presentation. Each person was given a copy of the final report. After allowing an hour for the press to study the report, the members of the committee, a few members of my staff, and I held an open press conference. The report hit the country like a bombshell. It was front page news and a lead story on every radio and television station in the United States and many abroad. The report not only carried a strong condemnation of tobacco usage, especially cigarette smoking, but conveyed its message in such clear and concise language that it could not be misunderstood.

At the time of the press conference I gave my verbal support of the report and a few days later issued a formal written endorsement. Since that time the Public Health Service has stood fully behind the report. In addition to the 7,000 scientific articles reviewed by the committee, there have been more than 30,000 articles published in the 20 years since the report. Almost without exception they confirm the committee's findings and extend the knowledge of the health hazards of smoking.

In the face of this overwhelming scientific evidence, the tobacco industry has continued to maintain that the evidence is not complete and that more research is needed. Of course, these companies do not want more evidence on the subject, preferring to fund certain researchers who accept grant money in exchange for attempting to divert attention from the bleak facts about smoking and helping to perpetuate such myths as the safe cigarette.

Immediately after the Advisory Committee's report, tobacco company executives became agitated about the possible collapse of the industry. They established the position of Commissioner (similar to the appointment of Judge Kennesaw Mountain Landis by professional baseball after the "Black Sox Scandal"), who was to review all tobacco advertising prior to publication. The first such commissioner was a former governor of New Jersey, who soon resigned. Another prominent public figure, a former US ambassador, also found the job meaningless and quit. So much for the self-proclaimed integrity and public health concern of the tobacco industry!

The same is true of the "code of ethics in advertising" after the report was published. Among other things the tobacco companies announced that they would no longer use prominent sports figures or sporting events in their advertising. This, too, has been violated at every turn, as a look at professional soccer, tennis, auto racing, or football will confirm.

In 1970, when cigarette advertising on the broadcast media was banned, the industry spent about $300 million to promote smoking. Today, the six American cigarette companies spend $1.5 billion annually for advertising on billboards, in newspapers and magazines, and on countless promotions, many of which are televised. There is heavy targeting of cigarette advertising toward teenagers, women, blue collar workers, and cultural minorities—vulnerable groups that now have the highest level of smoking and the lowest rate of smoking cessation. The hirelings of the advertising industry are out to get them at any price.

Today, less than 15% of our physicians and dentists smoke, the smallest level of smoking in any segment of our population. On the other hand, I am disappointed in the number of nurses and other health workers who smoke and the lack of a more positive antismoking posture of many of our physicians.

The abuses by cigarette companies are too numerous to mention. It is clear that they do not want the public to recognize the health hazards and the enormous financial cost to society caused by smoking. Therefore, health professionals must take back the leadership role. Physicians must not only serve as exemplars, they must also be the leaders who take the message to their patients, friends, and associates, and to the general public. The one person who can have the most influence in determining whether one starts or continues to smoke is the physician.

I hope that every member of the medical profession will recognize this responsibility and will be committed to spreading the message that tobacco smoking is the single most preventable cause of disability and death in the United States today.

One further thought. There was a time when it appeared that women were less susceptible than men to the health hazards of smoking. More recent evidence had indicated that women are as vulnerable and that in certain circumstances, such as while taking pills for birth control or during pregnancy, women face a more serious risk than do men. The comment of former Secretary of Health, Education and Welfare, Joseph Califano, Jr, rings in my ears: "Women who smoke like men, die like men!" I would only add that women who smoke during pregnancy not only carry the same personal risk to their health, but that they are imposing an additional risk to their unborn child. In other words, *cigarettes are child abuse.*

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A warning against complacency

WILLIAM H. STEWART, MD

For 20 years, since the Surgeon General's benchmark report proclaimed smoking as one of the major public health problems in this country, a titanic struggle has been waged between health professionals supporting this contention and an industry trying to persuade people to smoke for pleasure and emotional support.

No winner can yet be declared. However, in spite of the lopsided media exposure given to the promotion of tobacco products in our society, there is enough evidence of rejection of cigarette smoking to provide a glimmer of hope that the struggle may be successful.

In his forward to the 1982 annual report of the Surgeon General on smoking, Edward Brandt, Jr, MD, Assistant Secretary of Health, wrote, "I am encouraged by the recent decline in cigarette smoking rates in this country. Today, only one third of adults smoke, a decline from 42% in 1965."[1]

The sentiment expressed by Dr Brandt is strengthened by an analysis, also found in the 1982 report, of the changes in the presence of cigarette smoking among successive birth cohorts for men and for women between 1900 and 1980. Men born in the decade 1911–1920 turned out to be the champion smokers of the twentieth century, reaching 70% smokers during the decade 1941–1950 when they were 20 to 40 years of age. In men born after 1920, the peak prevalence has been declining for each successive cohort. For those born in the decade 1951–1960, the last cohort to reach smoking ages by 1980, the peak prevalence rate seems to have been reached at about 40%.

Among women, those born in the decade 1931–1940 win the women's title of champion smokers of the twentieth century, reaching a peak prevalence rate of 45% in the decade 1961–1970. This is considerably lower than the peak prevalence rate for women for each successive cohort born later than 1940. For those born during the decade 1951–1960, the peak prevalence rate was about 37%, a less dramatic fall than has occurred in men.

Because of the long latency period between the initiation of smoking and the appearance of lung cancer, the decline in the prevalence rates of smoking in men and women would not be reflected, as yet, in a decline in the mortality rates due to lung cancer. There has been a drop in the age-specific mortality rates for lung cancer at the earlier ages for both men and women. This may be the beginning of a downward trend, but it is too early to tell if this is so.

The 1982 Surgeon General's report should encourage health promotion activists that they are having an effect on the prevalence rate of smoking. Ironically, the fact that nearly all of the best-selling brands are promoted as having lower levels of "tar" suggests that even among those who have not yet stopped smoking, the message that smoking is harmful is filtering through. But it would be a great mistake if this is taken as a sign the struggle is over. On the contrary, it should stimulate and encourage the campaign against smoking to new and greater efforts.

The truth about cigarette smoking needs to be promoted by a variety of means in order to offset the constant drum beat of the cigarette companies' marketing messages. Yet continually chiding that cigarette smoking is harmful to health is not enough. Special efforts are called for to reach specific groups with a health message that is effective. For instance, as the number of persons who smoke declines, those who continue to smoke are the most resistant to change and will require the most help to stop smoking. Similarly, it is not enough to direct a campaign to adolescents without rcognizing there are several subcultures in the teenage population with quite different perceptions of reality. Each must be approached through an individualized world of awareness.

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"NO MINORITY REPORT WAS WRITTEN ..."

The final conclusions of the Advisory Committee were based upon systematic evaluations of clinical, pathological, experimental, and epidemiologic evidence. Judgments of causality followed predetermined criteria on the associations between smoking and a disease entity or process. The elucidation, exposition, and application of these criteria were a notable epidemiologic accomplishment of the Advisory Committee, whose members learned from each other and taught each other the rules and scientific percepts of their individual disciplines. No minority report was written. Scientific evaluations were objective, and the Report represented conclusions unanimously acceptable to every member of the committee. . . . .

The Advisory Committee proved to be an influential force in the policy process of government. As a committee it was not a continuing one, for its official life lasted but fifteen months. Its influence, however, through the various wheels it set in motion, continues to be felt in the years of successive events, favorable for the most part to the health of the public. The Report to the Surgeon General, born despite adversity, may have served to weaken the power of the tobacco subsystem to a modest extent, but it enhanced the resolve, unity, and power of the health forces immeasurably more.

—LEONARD M. SCHUMAN

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J Pub Health Pol 1981; 2:19–27

Women and children last?

Attitudes toward cigarette smoking and nonsmokers' rights, 1971

JESSE L. STEINFELD, MD

By January 1971 Dan Horn, PhD, and his staff at the National Clearinghouse for Smoking and Health had reviewed with the government's internal and external scientific authorities all the evidence available on smoking and health in order to produce a single comprehensive volume critiquing the literature and updating the 1964 report. However, this new Surgeon General's report had not been cleared by the Office of the Secretary of Health, Education, and Welfare (HEW) or by the Executive Office of the President. This meant that at the January 11, 1971 meeting of the Interagency Council on Smoking and Health, which coincided with National Education Week on Smoking and Health, I would not be permitted to summarize the report. Rather, three days before the meeting I was told to write a personal speech and not discuss the report. This I did with my own review of the scientific data, followed by some personal observations. I was promptly and severely criticized by my superiors in HEW. Following are excerpts of that speech.

> There is one hazard associated with smoking which concerns me particularly, and should concern all members of the Interagency Council: the effects of cigarette smoking in pregnancy. The 1964 Surgeon General's Report noted that smoking during pregnancy could result in babies of lower than average birthweight. At that time there was no evidence that this necessarily affected the biological fitness of the infant. In our 1967 *Health Consequences of Smoking*, we advised that in light of this prematurity factor it was "prudent" for pregnant women not to smoke. In 1969, it was suggested that there was a relationship between smoking during pregnancy and spontaneous abortion, stillbirth, and neonatal death. Now there is a substantial body of evidence which clearly supports the earlier view that maternal smoking during pregnancy harms the unborn child by exerting a retarding influence on fetal growth. In addition to the already established data on low birth weight in the pregnancies of smoking mothers, there is new data on fetal wastage and neonatal death. One study showed that these women have 20% more unsuccessful pregnancies than they would have if they had not smoked. The British Perinatal Mortality Survey, the largest prospective study to deal with this question, demonstrated that smoking mothers have significantly more stillbirths and neonatal deaths than non-smoking mothers.
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> Fetal wastage is a terrible tragedy, as is the loss of an infant, and let me suggest that certain purveyors of cigarettes stop making awkward remarks about how some young mothers in childbirth might welcome smaller babies. The mother who smokes is subjecting the unborn child to the adverse effects of tobacco and as a result we are losing babies and possibly handicapping babies.
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> The influence of smoking upon pregnancy brings up the whole problem of women and smoking. One third of all women in the childbearing years are smokers and their numbers are building up as more and more teen-age girls get started on the smoking habit. In the past seven years, there has been an appreciable drop in smoking among men but regrettably there has been no comparable drop among women. . . .
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> From the very beginning the cigarette industry has done everything it could to bring women into the smoking population. In the early days of advertising, a nonsmoking lady would be shown appealing to her gentleman companion, "Blow the smoke my way," or saying, "Reach for a Lucky instead of a sweet." The latter slogan caused considerable furor in the candy industry, but lured many weight-conscious women to take up smoking. In the past half century the advertising has become more blatant; women have been enticed by endorsements from ladies of fashion and even opera stars; they have been led to the bait by young, modish, sophisticated models who live and play in elegant settings, accompanied by male companions who are handsome and virile. To all of this has been added cigarettes just for women, and what could be a more effective way to advertise them than to suggest that the fair sex has come a long, long way since the days when they could smoke only behind closed doors? The makers of one brand which has just come on the market have promised a veritable flood of print advertising in women's magazines, entertainment programs, newspapers and Sunday supplements, and on billboards.
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> One of the most important reasons for the low cessation rate among women is the fact that they have yet to experience the toll of death and disease from smoking which men have had. Partly this is because women, until now, have smoked somewhat differently than men. As a rule they smoke fewer cigarettes per day, inhale less frequently and less deeply, use lower tar and nicotine cigarettes, and consume smaller portions of each. Primarily, however, the difference may be explained by the shorter period in which women have smoked. We know, for instance, that women did not start to smoke in any great numbers before World War I; thus few in their 70s and 80s have had the same exposure to this health hazard as men of the same ages. With each succeeding decade more women did take up smoking, and they started at earlier ages; yet there have always been fewer women smokers, proportionately, than men. This holds true today despite the changes in smoking habits I have already noted.
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> Since there are fewer women smokers to be affected, the relative death rates from smoking-associated diseases are going to be smaller than those of men. Furthermore, their overall death rate from almost all other diseases is generally lower than that of men. A man will see his friends, co-workers, and relatives dying at relatively young ages from heart disease, lung cancer, and other smoking-related diseases. A woman may be less conscious of such deaths among her women friends and relatives and consequently feel herself somehow safe from the hazards of smoking. But this may change. I want to emphasize that while men's death and disability days are higher than women's, the woman smoker has a higher death rate than the nonsmoking woman.
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> Currently, girls are rushing to emulate the cigarette smoking practices of boys. What will happen to these young smokers? Some will stop once the glamour wears off and their crowds disperse after high school days are over. A very large number will undoubtedly continue to smoke, for a habit started that early in life is one that is hard to break. . . .
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> The plethora of ads promised by the tobacco industry is of concern on two counts. First, it may encourage young people to

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take up smoking; but, more important, it may tend to shake the resolve of those who sincerely want to quit. An overwhelming dose of ads in women's magazines could have such an effect, for women basically find it harder to give up smoking than men and even those who quit are more likely to return to smoking than men. Data for 1970, for instance, shows that above 25% of all men smokers managed to quit, while only 15% of women smokers were able to give up the habit.

We do not know why women have not made a better showing. Perhaps it is an affirmation of the desire to break away from old social restrictions. Certainly advertising has played a part. It may be that the housewife's basic environment is more conducive to continue smoking, particularly if she is alone part of the day. In the business world, smoking undoubtedly helps create a sense of equality with men. Some women keep up the smoking habit because of the fear of weight gain that may accompany cessation.

Today, January 11, 1971, even though cigarette commercials are now off the air, a new broadside attack through the print media is bound to have considerable impact. The onslaught has already started. My staff counted a total of 36 cigarette advertisements currently carried in eight of the leading magazines aimed exclusively at women. One of them has eight such ads in the current issue. These journals are not just the kind that stress hair styling, grooming, and the secrets of being popular. Those surveyed included homemaking magazines which carry articles on child care and household hints—journals that have wide popular appeal to women in all walks of life. . . .

The health professions must become more active in the smoking and health field. Obstetricians and gynecologists should have a particular concern about smoking's effect on their patients. One group of professionals has a particular stake in this effort—not only because they are women, but because they have an opportunity to exert a considerable influence on other women. I refer to our nurses who play an important role in so many areas of health care—in hospitals, clinics, physicians' offices, industrial health units, school health programs. The American Nurses' Association two years ago passed a resolution calling on its members to be informed about the health hazards of cigarette smoking and encouraging them to involve themselves in positive health education programs to prevent nonsmokers, particularly youngsters, from starting to smoke. I regret to say that there are still more smokers proportionately among nurses than among women generally. Of course I do not mean to suggest that our efforts should be limited to women or that men and boys should be neglected in future educational campaigns. Our obligation is to all segments of the population; our challenge is to turn back the new rising tide of cigarette consumption.

Finally, evidence is accumulating that the nonsmoker may have untoward effects from the pollution his smoking neighbor forces upon him. Nonsmokers have as much right to clean air and wholesome air as smokers have to their so-called right to smoke, which I would redefine as a "right to pollute." It is high time to ban smoking from all confined public places such as restaurants, theaters, airplanes, trains, and buses. It is time that we interpret the Bill of Rights for the Nonsmoker as well as the smoker.

Although this call for a nonsmokers' rights movement was not looked upon approvingly within the Office of the Secretary of HEW, it brought forth a blizzard of mail with an overwhelmingly favorable response. I had previously asked the individuals responsible for the scientific content of the Surgeon General's report to summarize all available data on the effects of smoking on the passive or involuntary smoker. This material was published in a subsequent Surgeon General's report. In the wake of this report, the General Services Administration, which operates all government office buildings, required its tenants for the first time to make some provisions for nonsmokers. My feeling in 1971 was that continued warnings regarding the health hazards of smoking would be less effective in controlling the smoking epidemic than social actions such as peer pressure, other social pressures, and legislation to protect the nonsmoker. This "semi-official" call for social activism has been followed during the past 12 years by a number of city, state, and even federal regulations protecting the nonsmoker. Perhaps the consequence I could have least likely foreseen after the January 1971 speech was to be named "Public Enemy Number One" by the tobacco industry.

THE EVOLUTION OF THE FEMALE CIGARETTE AND THE SILENCE OF THE WOMEN'S MOVEMENT

Cigarette advertisements increasingly directed at women have escaped the notice of feminists campaigning to remove sexist stereotypes in advertising. Ironically, this is because cigarette advertisements rarely portray women in overtly dumb-blonde or passive roles. The National Advertising Review Board (NARB), part of whose job is to make recommendations on "matters of taste and social responsibility" in connection with US advertising, specified 14 negative and undesirable (or sexist) ways in which current advertising portrays women. Of these, I could find only three which cigarette ads breached. Furthermore, the ads actually fulfilled six of the nine proposals from the NARB on how women could be portrayed constructively. . . .

A peculiar silence — almost a resistance — surrounds the question of smoking among women's organizations. As far as the women's movement is concerned, smoking is someone else's problem. The now prolific literature on women's health and health care is remarkable for lack of attention to the issue. . . .

I contacted more than fifty women's organizations on both sides of the Atlantic, some feminist, some not, some national and some local, but most failed to reply. The National Organization of Women (NOW), for instance, which has taken a highly active role on many women's health issues in the USA, was not prepared to comment, and in its 40-page submission to the 1979 Kennedy hearings on women's health, NOW did not make a single reference to the problem. Indeed, had the American Cancer Society not referred to the rising lung-cancer rates in women in its own evidence to the hearings, the issue would not have been raised at all.

The National Women's Health Network, which represents over a thousand women's health organizations, has "no formal position on smoking."

It is the same story in Britain . . . The Birmingham Women's Health Group seemed to sum up the prevailing attitude among many British women's groups:

> When we read your letter there was a great reluctance in the group to spend a whole meeting discussing smoking. Most members (despite being smokers themselves) felt there were more important issues to discuss.

—BOBBIE JACOBSON
The Ladykillers–Why Smoking is a Feminist Issue,
London, Pluto Press, 1981, pp 60, 78–79.

Ending the cigarette pandemic

JULIUS B. RICHMOND, MD

A year after the issuance of the original Surgeon General's report, Congress passed the Federal Cigarette Labeling Advertising Act, which required that all cigarette packages distributed in the United States carry a Surgeon General's warning that smoking may be a hazard to health. In 1969, Congress passed the Public Health Cigarette Smoking Act, which banned cigarette advertising from radio and television.

In 1979, on the fifteenth anniversary of the first report, the Surgeon General published the most comprehensive volume on smoking ever issued in the United States. The data on cigarette smoking's adverse effects on health were overwhelming, and the press recognized this. No longer able to count on journalists to cast doubt on the reliability of the data, the industry changed its strategy by attempting to portray smoking as a civil rights issue. The tobacco industry began pouring millions of dollars into campaigns to prevent the passage of municipal, state, and federal legislation that would ban cigarette advertising or restrict smoking in public places and at the work site.

The publication, also in 1979, of *Healthy People*, the Surgeon General's first report on health promotion and disease prevention, emphasized the necessary future direction of medicine: prevention.

In the years ahead, efforts to end the cigarette pandemic will need to focus on the following:

An end to the victimization of women. In 1980, the Surgeon General's report predicted that women *en masse* would suffer a fate similar to that of men if they continued smoking: By the mid-1980s, lung cancer would surpass breast cancer as the leading cause of death among women. This prediction is a nightmare come true. The death rate from cancer of the lung has increased from 4.6 per 100,000 in 1950 to a projected rate of 20.9 per 100,000 in 1982. In 1983, 17% of cancer deaths in women will be due to lung cancer; 18% will be due to breast cancer.

A greater focus on adolescents. Seventy-five per cent of those who smoke become dependent on cigarettes by age 20. It goes without saying that the medical profession can no longer remain indifferent to the exploitation of adolescents by cigarette advertisers. All future efforts to curtail smoking must center on the age of onset of this form of drug dependence.

More effective strategies for smoking cessation. Over 90% of adults who smoke say they would like to stop smoking. It is incumbent on the medical profession to reinforce this choice among their patients and to encourage legislators, government officials, and industry to develop strong positive incentives for not smoking. It is time to stop pretending that smoking is not a preventable problem.

More attention to clean indoor air rights. It is astounding to contemplate how a single industry has been allowed to undermine not only the health of three generations of Americans but also a treasured age-old amenity like common courtesy. Persons who still smoke are no longer encouraged to ask whether anyone else objects or to be concerned if children are present. Advertising images encourage smoking as the social norm. Physicians must help mobilize greater respect for the rights of the vast nonsmoking majority, especially children.

Abandonment of recommendations to switch to low-tar, low-nicotine cigarettes. Of the many lessons we have learned about smoking, one of the harshest is that low-tar, low-nicotine cigarettes do not lessen the risk for myocardial infarction or impaired pulmonary function. Unfortunately, there is no safe cigarette.

Revelation of chemical additives in cigarettes. In the development of so-called low-tar, low-nicotine cigarettes as a means of allaying health concerns about smoking, the tobacco industry has added hundreds of chemicals and artificial tobacco substitutes to enhance palatability. The industry has prevented the public from learning the names of these chemicals. This information must be revealed.

The epidemiologists have now documented the devastating nature of the health problems attributable to cigarette smoking. But the minimal budgetary allocations to fight smoking testify to the lack of political will of government to meet the challenge. The medical profession must take the lead in making the cigarette issue our number one health priority.

Dr Richmond served as Surgeon General of the United States Public Health Service from 1977 to 1981.

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> "As a new Fellow of ACCP and a leader in the most important struggle faced by chest physicians, the prevention and control of our major health problems of lung cancer, cardiovascular and chronic pulmonary disease, I shall make a special personal effort to control smoking and to eliminate this hazard from my office, clinic and hospital. I shall ask all of my patients about their smoking habits and I shall assist the cigarette smoker in stopping smoking. I make this pledge to my patients and to society."
>
> —from the Fellowship Pledge of the American College of Chest Physicians

Confronting America's most costly health problem

In November 1981, C. Everett Koop, MD, became Surgeon General of the United States Public Health Service and deputy assistant secretary for health in the Department of Health and Human Services. Born in Brooklyn in 1916, he received his MD from Cornell in 1941. In a 35-year career spent in large part as Professor of Surgery and Surgeon-in-Chief at Children's Hospital of the University of Pennsylvania, Dr Koop became one of the nation's foremost pediatric surgeons. Dr Koop also served as editor of the Journal of Pediatric Surgery. *Most of the surgeons who trained under him now either head departments of surgery or hold the title of professor.*

Early this year, Dr Koop responded with enthusiasm to a request from Journal *editor Alan Blum, MD, for a dialogue on the subject of smoking. They met for two hours on February 26 in Dr Koop's office in the Department of Health and Human Services.*

Alan Blum, MD: Current headlines and news stories reflect a concern for the environment. Politicians are venting their anger over dioxin, nuclear radiation, or formaldehyde foam. The public has been put into an uproar over the question of toxic dumping. Why don't we have that same kind of environmental concern about what Surgeons General over the past 25 years have described as the most harmful product in our society—cigarettes?

Everett Koop, Jr, MD: I have that concern. And the environmental issue of second-hand or passive side-stream smoking is a very important priority of mine. I think that we are going to prove without any doubt how dangerous this is to the nonsmoker, starting with the unborn and going right on through to the elderly.

AB: If there is any doubt at all, why do we err on the side of harm?

EK: We didn't err on the side of harm in the last Surgeon General's report (on cancer). We quoted studies from Japan, Greece, and the United States. The American study was small and not statistically valid, but the Greek study and the larger Japanese study of lung cancer in the spouses of those who smoke showed beyond any shadow of a doubt side-stream smoking is very dangerous to your health.

AB: But what about the more elemental things like the smoke-filled work place—the kind of disability that so many more people are exposed to?

EK: Take the incidence of colds and pneumonia in toddlers whose parents smoke. It is very clear. There is no doubt about it, and I think that it is a very serious environmental hazard. And one that I object to having to put up with as a nonsmoker.

AB: The data on tobacco smoke pollution in the indoor environment seem to imply at least as compelling a public health hazard as Legionnaire's bacilli cultured in air-conditioning systems. But what will it take to bring about a public outcry on the side-stream issue?

EK: I think certain things are coming up. You mention the issue of not being able to work and feeling uncomfortable due to asthma and having exacerbations. There are a couple of lawsuits going on now that I think will tend to elevate this in the eyes of the public. The other thing that I have always felt strongly about is that the present Surgeon General's warning on cigarettes has been there so long and has been stated in the same way so frequently that no one notices it any more. I think if we had rotating labels and if one of them said, "The smoke from the cigarette you are about to exhale is dangerous to the health of your children," it would have far greater effect than saying "dangerous to your health."

AB: You are presuming that people truly care for children in society. And you may not recall Senator Frank Moss who said it is absurd to talk about the warnings on billboards and the like when nobody can see them. So you are honing in on the *content* of the warning. Whether it be rotating or not, what gives you any hope that the warning is anything more than an "out" for the industry to prevent it from being sued?

EK: There is no doubt that it is the latter, but I am also a firm believer in anecdotal information that comes my way; and one of the things that I do hear repeatedly from people is that "If I had seen that warning on cigarettes when I was a teenager, I wouldn't have started." Maybe that is hindsight, I don't know. But I think we've got to go with everything that we have. One of those things is to change the size of the label, or to vary it so that it sticks out in a different way: When you just see that little box, it isn't hard to ignore the fact that it is there.

AB: What about enlarging the warning on billboards to the size of the Marlboro man and bringing the Marlboro man down to the corner to say, "Hi, smoke Marlboro and be macho"?

EK: For your kinds of spoofs, I know you'd love that.

AB: Seriously, what's wrong with that? The industry is fond of saying that everybody's heard about the "alleged dangers" of smoking and now has a free choice of what to do. What kind of sense of fairness says that camouflaging an industry-approved warning down in the corner of a huge billboard of a cowboy or other hero model enables a child to have a free choice about smoking?

EK: I am not coining a statement to tell you that life isn't fair.

AB: Well, if it is not fair, then what kind of commentary is it on our political system? In *Private Practice*, you have described your role as being one of an apolitical advisor. You could say to people, "Smoking is injurious to your health," but you couldn't tell people, "Don't smoke."

EK: I do tell people not to smoke all the time. I say it publicly. I say it on radio. I say it on television spots. Any place people will listen to me, I say, "Don't smoke." I say "Smoking kills you."

AB: And how are you received?

EK: Of course, I am not out there in the television audience, so I don't know. But when I can talk to young kids and ask them, for example, "How would you feel if instead of the newspaper saying that somebody died of cancer of the lung, it just said 'He died of smoking'? Would that have an effect on you?" And the answer is "yes." As a matter of fact, several suggestions have been made that we should change death certificates: instead of saying "died of cancer of the lung," we'd write "died of smoking complicated by . . . ."

AB: Dr Joe Davis, the Medical Examiner of Dade County, Florida, has written about this. There is a doctor, Charles Tate, MD, of Miami who does just that, and he has raised some eyebrows. People don't like change or rocking the boat. That's the whole point: again it seems as if we are almost hovering defensively, trying to think of strategies to counteract an industry that has every incentive in the world to entice children to buy cigarettes, including tax write-offs for its advertising. It can do whatever it pleases with full impunity.

Is this not demoralizing to you?

EK: It is terribly frustrating to me that the budget of the tobacco industry set aside to lobby here in Washington is five times that of the budget of the Office on Smoking and Health. It is frustrating to me that the money spent on advertising for cigarettes is more than on any other product in the United States (nearly $1.5 billion). And I guess it is demoralizing to me rather than frustrating when I realize that the target of that advertising is the young individual who everybody knows will become hooked to the most addictive drug that we use in this country—nicotine—if he starts when he is 14, 15, 16 years old.

AB: But they say they are only after " 'adult smokers'. We only want to keep our customers. We don't want kids to smoke."

EK: There is some discrepancy between those statements and the obvious thrust of the advertising.

AB: At hearings in Chicago and at AMA meetings, Ron Davis, MD, has shown that children are being given free packages of cigarettes on street corners and at state fairs. What better kind of proof do we need that these people are pushing at children? What will it take to energize public reaction?

EK: If you'd like my real belief about how this is going to turn around, it is not going to come from a governmental effort. It is going to come from the private sector.

AB: And which corporations have come to you and said, "Gee, I am so captivated by your statements I want to help you?"

EK: I haven't found anyone clamoring to come in here. I would think it would be a real natural for insurance companies, though.

AB: You would think that there are some child-oriented industries that would want to show how concerned they are for kids; that might want to sponsor a *real* "Smoke-Out" 364 days a year and give the tobacco companies one day for a fund-raising "smoke-in." Are the health charities doing all they can do?

C. EVERETT KOOP, MD

EK: I think they are beginning to do more.

AB: Immediately after the comprehensive Surgeon General's reports were published in 1964, 1971, and 1979, the per capita consumption of cigarettes declined. Doesn't that suggest that people do follow the Surgeon General's advice but then something happens, which obviously is the money spent on advertising, to undermine that belief?

EK: My concern is the same about many things in the Public Health Service, and that is that this country is geared to reparative and rehabilitative concerns about health. To give an example that has nothing to do with smoking, I am having a lot of trouble getting a preventive program for hip fractures organized in this country. We have 300,000 hip fractures that cost a tremendous amount of money; we can prevent perhaps half of them with an educational program—how to choose a chair, how to get up from a chair, how to get out of bed, how to get out of a car, how to wear the right shoes, and so forth. But the thing is that reparative surgery, such as Teflon hip joints, is much more glamorous.

AB: This is akin to what seems to have happened with medical students. Those who might have become involved in tackling and making real progress against the pandemic of smoking-related diseases seem to have bypassed the smoking issue to cry out against nuclear war. Frankly, I don't know anyone who is *for* nuclear war, and I am finding it difficult to understand the neglect for the very concrete issue of the smoking holocaust, as opposed to the more timeless and abstract issue of war.

EK: I think it is the glamor issue again. This is the year for joining an antinuclear movement.

AB: But could it also be that the smoking issue is too intellectually simplistic for the medical community to deal with? "Okay, fine, it causes disease, so what else is there to do?" I don't know of a single course in medical schools related to techniques for improving the primary prevention of disease. I had a one-hour lecture on smoking in four years, and most people I speak with didn't even have that. Could we not mandate or suggest that there be additional physician training in this? To my knowledge there is not a single full-time physician in the world involved in mass media ways to counteract cigarette smoking. How would you like to get physicians involved, apart from those crazies of us who don't mind the lack of glamor of this issue?

EK: I think it is those crazies who will eventually prevail, because they will attract more people to them—innovative people who are different and who will approach this in an off-beat way.

AB: There was a quote in *The Lancet* last year, to the effect that no student should get out of medical school without going down to a cigarette billboard and writing a skull and cross bones on it. Is that too radical? Is taking to the streets like that, as physicians are doing in Australia, going too far? Or have we come to a point where property is more valued than life?

EK: I think people who feel strongly enough to take to the streets are ridiculed by the press in this country. And I think that keeps a lot of physicians, who are more or less staid people, home. There are a number of physicians in this country—I would suspect more than half—who are incensed about abortion. But they see a radical fringe doing things that the press ridicules, and rather than have somebody say, "Well, he is part of that," they just stay quietly at home. I have been very outspoken about my opposition to abortion, to infanticide, and to euthanasia. Every place I go, I meet silent physicians who say, "I am with you all the way." But they are not verbally with me, they are not visibly with me, and I think this is true about smoking.

In the last 20 years, I have been talking against smoking. Now I feel I have a mandate. I am in a job that demands that I do this, and I do it to the best of my ability. But it is a very big job, and we are a small cadre. I am concerned that people are terribly critical of things that government tries to do—critical to the point where they cease to be neutral and become almost opposed to you.

AB: I know that you do get involved in advising the World Health Organization (WHO) and other international agencies. Where has the United States stood on the promotion of cigarettes in the Third World, where people may not have the sophistication or knowledge that we have about smoking?

EK: In representing the United States at the WHO, I have begged the Third World countries who do not yet have cigarette advertising to stop it before it begins. But you know what happens? The money that can come to a country by increasing the sale of cigarettes and increasing the tax on them seems beneficial to that country's economy at the moment, until the health problem catches up with them many years later.

AB: Is that argument still valid today? I notice that there has never been a Surgeon General's report on the health costs attributable to cigarette smoking. That's been alluded to, but why not get rid of the myth that the sale of cigarettes is a boon to the economy?

EK: We've said that. I say it when I talk. I say it when people ask me questions about smoking. We can give them figures about what it costs in actual health care as far as we can figure—$13 billion the last year that we calculated, which I think was 1979. But an additional $23 billion work loss and the morbidity that goes with that is not included. They are also not measuring something else far worse—the cost of human dignity and quality of life of the families left behind by people who die due to smoking.

AB: Yet developing countries from New Guinea to Namibia are under a veritable siege by the tobacco industry, which is still using movie stars and athletes to sell cigarettes. I wonder, too, if there is not a regression in our own country with the introduction of the slogan, "Camels. Where a man belongs." When will this type of exploitation—the vulnerability aspect that is exploited through advertising—be a main part of a Surgeon General's report? Or will that have to be studied and "proved" before it becomes something that can be acknowledged by the Public Health Service?

EK: I think that you are touching on one of the reasons why the private sector has to do it. The government has to be extraordinarily careful when it makes a statement. It has to be able to back it up from every conceivable point of view, whereas the private sector can take liberties. I could say things in my former life that would be considered outrageous for me to say here, but they were true statements; it's just that I couldn't nail them to the wall in the way that the government has to do, because of all the pressures that you get—the lawsuits and that sort of thing. But you have asked me questions that are really prophetic, and I can't give you those answers.

I think that what you are asking me is, "You are the Surgeon General and you say these things. And you are not afraid to say these things. And you believe these things. Therefore, why doesn't the government get behind you?"

I wish they would.

AB: One issue that consumers of cigarettes and nonusers alike agree on is the need to force manufacturers to remove the chemical additives to cigarettes that prevent them from self-extinguishing and are responsible for 2,000 burn deaths a year in the United States.

EK: I spoke to that issue at a symposium in Houston in February on the injured child. There was a half-day on burns, and I said if we are going to talk about prevention one of the things that has to be addressed is the removal of these chemical additives. This measure is succeeding in the private sector, and the AMA has at last supported the proposed regulation.

AB: Overall, is the AMA doing enough on this issue?

EK: I don't think anybody is doing enough. Let's just say that tomorrow a new something came along that was going to kill 340,000 people next year. Would there be any kind of an outcry? Suppose the killer bee was coming in from South America and they said there were going to be 340,000 people who would die. Would there be a tremendous public response to surround people with something to protect them, to give them something to fight the bee, to take them to a different country until the bee was gone? Of course there would. I think that one of the things about human nature is that if it comes slowly and very gently into your life and all of a sudden it is there and surrounded by advertising, by glamor, by all the things we have been talking about, then it is very hard to see it. You look back on history and you wonder why those idiots didn't see what was happening at a certain time. When you and I, when we're in history, we are those idiots, and we don't see it happening because it is very hard to look at history developing around you. You can't see from the perspective of distance. And I think this is one of the things that has happened with cigarette smoking.

AB: It is fascinating, though, to listen to the initial denial of people who don't believe that they are affected by advertising, least of all when it comes to smoking. But I am encouraged by the number of people who later tell me that once they started paying attention to cigarette advertising, perhaps after having seen a spoof of a cigarette ad, they didn't realize how pervasive and insidious this propaganda is.

EK: There are two things that encourage me about the smoking issue. One is that the per capita use of cigarettes is dropping, and the second is that young people have turned the corner and are coming down. When you quiz them on the high school survey, they do recognize that maybe it is not terribly important to be macho like the Marlboro man. Maybe it is not so smart to be as thin as the girl in the Virginia Slims ads. If you were to ask me what would I do if I could do anything about the problem of teenage smoking, I would like to go back before kids start to smoke—perhaps at about age 12—and start showing them how their lives can be influenced by things like advertising that don't tell the whole story.

AB: This approach, combined with local mass media advertising, is what the group of physicians, DOC, has done in junior high schools. Not that huge grants are required, but it is discouraging that the curative research field gets so well funded in contrast to the preventive strategy you just mentioned.

EK: I think it gets back to what we have discussed. It's part of the American system that reparative techniques and other glamorous things are funded and garner the attention. To stop kids from smoking is not glamorous, and it is very hard to make it glamorous.

AB: The Office on Smoking and Health hasn't been given much money, I know. But has it ever considered paid counter-advertising in the mass media?

EK: I can't answer that. We don't even have enough money to think about it right now. We just barely have enough money to get out the annual report.

RELATIVE IMPORTANCE OF CIGARETTE SMOKING IN OCCUPATIONAL LUNG DISEASE

Since the turn of the century the burden of respiratory disease on our community has changed. Some of the benefits have been due to improved social conditions and some to more effective medical care. There remains a serious level of disease and premature death due to chronic bronchitis and asthma that is unlikely to respond further to social change or to treatments available at present. The incidence of lung cancer has increased alarmingly. These three diseases—bronchitis, asthma, and lung cancer—are at least in part due to materials inhaled into the lungs and to this extent are preventable.

Much has been done at the result of the Clean Air Act to improve the general level of atmospheric pollution, and this may be the reason for the recent improvement in morbidity and mortality for bronchitis. But the other two important sources of pollution of inhaled air (the work place and tobacco smoking) could be reduced further. In this age of financial stringency, cost effectiveness is often the ultimate determinant as to which we should tackle first.

I have reviewed the evidence of the relative importance of smoking and dust in coal miners, slate quarry workers, iron and steel workers, and those working with asbestos. The evidence is scanty and in many instances unreliable. But it indicates that although dust may cause the symptoms of bronchitis in young men, these symptoms may persist but are unlikely to cause serious airways obstruction or premature aging of the lung (emphysema). In most cases smoking is the main cause of bronchitic symptoms in all age groups and may lead to airways obstruction and emphysema. . . .

Only in the archaic conditions of the slate industry did dust exposure exceed cigarette smoking as a cause of disabling disease. In all the other situations reviewed, cigarette smoking was the dominant cause of symptoms, of disability, and of premature death from respiratory disease. Bearing in mind that smoking also causes serious cardiovascular disease, there is no question that even in these dusty industries stopping smoking would have a greater effect on the burden of disease than the complete suppression of all the dusts and fumes.

—P C ELMES
(The Ernestine Henry Lecture delivered at
the Royal College of Physicians, London, November 6, 1979)
Br J Ind Med 1981; 38:1-13.

The three review articles in this section were invited in anticipation of the 1983 report of the Surgeon General, The Health Consequences of Smoking: Cardiovascular Disease.

The systemic and coronary hemodynamic response to cigarette smoking

LLOYD W. KLEIN, MD, RICHARD GORLIN, MD

The mechanisms by which cigarette smoking contributes to the development and clinical manifestation of cardiovascular disease continue to be investigated. The epidemiologic association of smoking with atherosclerosis is established,[1,2] although the pathophysiologic process responsible for this effect remains unknown.[3] Cigarette smoke contains over 1,200 substances and their combustion products,[4,5] several of which could potentially be involved. A recent epidemiologic study suggests that nicotine and carbon monoxide may be less important to the subsequent development of atherosclerosis than previously believed,[6] although the basic premise of that study has been questioned.[7] The increased risk of sudden death in chronic smokers, however, is probably related to the arrhythmogenic potential of nicotine.[8,9]

In this brief review, we will discuss the proved physiologic effects of smoking on the cardiovascular system. Through a better understanding of the ways in which cigarette smoking affects the balance between myocardial oxygen supply and demand, the relationship of smoking to the pathophysiologic process can be better appreciated.

SYSTEMIC HEMODYNAMIC EFFECTS OF CIGARETTE SMOKE AND NICOTINE

The inhalation of cigarette smoke and the parenteral administration of nicotine lead to a well-defined acute cardiovascular response. This response in normal human and animal subjects includes increases in blood pressure, heart rate, and cardiac output.[10,11] Although myocardial contractile force and velocity of contraction also increase,[12] changes in stroke volume vary.[11] These acute physiologic effects last for about 15 minutes, gradually returning to baseline values.

The mechanism by which these physiologic events occur has been extensively studied. Nicotine stimulates all sympathetic ganglia,[13] resulting in the release of norepinephrine from post-ganglionic adrenergic terminals.[14,15] Consequently, peripheral vasoconstriction is produced from direct ganglionic stimulation,[16,17] by facilitation of conduction of impulses through ganglia,[18] and through chemoreceptor activation in the medulla and the aortic and carotid bodies;[18] therefore, systemic blood pressure rises consequent to the increased peripheral resistance. Heart rate increases, both due to catecholamine release[18,19] and to direct chronotropic effects. Myocardial contractility increases as the result of catecholamine release,[12] an effect that can be prevented by adrenergic beta receptor blockage.[20] Cardiac output increases,[21] primarily as the result of the increase in heart rate. Stroke volume changes can vary depending on the relative effect of increased afterload.

In the presence of left ventricular dysfunction, these systemic hemodynamic changes could be markedly altered. Depending on the degree of systolic dysfunction, one might anticipate that increased afterload could cause the stroke volume to fall dramatically, perhaps accompanied by a decreased cardiac output. In a preliminary study in our laboratory in patients with coronary artery disease, we have observed a smaller increase in blood pressure in patients with abnormal systolic function as determined by left ventriculography as compared with those with a comparable extent of coronary disease but with normal left ventricular function. This difference was statistically significant despite nearly identical changes in arterial-coronary sinus oxygen difference and double product (heart rate × systolic blood pressure). In several such patients, the systolic blood pressure was noted to fall with smoking.

INFLUENCE OF CIGARETTE SMOKING ON CORONARY BLOOD FLOW

As the result of the increased double product and increased myocardial contractility observed with smoking, myocardial oxygen demand is increased. In addition, the oxygen-carrying capacity of the blood is diminished in smokers as a result of elevated carboxyhemoglobin levels.[22] Carbon monoxide, a major component of cigarette smoke, is irreversibly bound to hemoglobin. This reduces the ability of oxygen to be exchanged in the capillary beds and, hence, available for myocardial cellular aerobic metabolism.[23] The net result of these factors is to increase myocardial oxygen demand and to limit myocardial oxygen supply,[24] which would potentially precipitate myocardial ischemia.[25]

In response to the increased oxygen demand, there are two compensatory responses available to the coronary vasculature that may result in increased oxygen delivery to the myocardium. First, the myocardial cells could improve

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their efficiency in exchanging CO_2 for oxygen; however, it is well known that myocardial oxygen extraction is nearly maximal at rest.[26] The second possibility is for coronary artery dilation to occur, allowing increased coronary blood flow.

It has been well demonstrated that there is an increase in coronary blood flow following the administration of cigarette smoke or nicotine accompanying increased myocardial oxygen demand in normal animal models.[27-29] Nicotine administration directly into the coronary arteries of dogs has similar effects.[30] When positive chronotropic and/or inotropic effects were produced during left circumflex artery injections, there invariably was an increase in coronary flow.

In those animal models with experimental coronary lesions and atherosclerosis,[31-33] no change, or a mild decrease in coronary blood flow, commonly occurs. Presumably, these observations reflect the inability of some diseased coronary arteries to conduct an increased amount of blood. Thus, when the coronary vasculature is unable to compensate for an increased workload, such as might occur in atherosclerotic coronary disease, cigarette smoke or nicotine elicits an increase in the metabolic requirements of the myocardium which cannot be supplied. In human subjects, cigarette smoking in the presence of coronary artery disease can lead to deleterious clinical effects, inducing angina pectoris at a lower than unusual workload[34] and of a more severe nature.[35]

Bargeron et al[36] were the first to investigate alterations in coronary blood flow during cigarette smoking in normal human subjects. Utilizing the nitrous oxide method with a coronary sinus catheter, coronary flow was measured at rest and again following smoking. Increased coronary flow was observed, and this is the generally cited "normal" physiologic response. However, Regan et al[37,38] studied both patients with coronary artery disease and normal patients. Despite increases in heart rate, cardiac output, and blood pressure, there was no change in coronary flow as determined by the nitrous oxide method in either group. However, both studies can be criticized on several accounts: (1) there was a small number of patients in each group, (2) the selection of patients was made on clinical grounds and was not related to coronary anatomy or to left ventricular function, and (3) the nitrous oxide method is a noncontinuous method which, by its nature, was carried out after the cigarette smoking was finished. In fact, in the studies by Regan,[37,38] coronary blood flow was determined more than 40 minutes after the initiation of smoking.

Several groups, including ours, are actively studying changes in coronary blood flow and coronary resistance with cigarette smoking using methods that are better suited to measure these effects. Our preliminary findings indicate that there is a marked difference between the response in certain patients with severe coronary disease and in those with normal coronary arteries.[39] Further studies are now in progress to elucidate the acute effects of cigarette smoke on the coronary circulation.

Coronary artery spasm related to cigarette smoking has never been reported in a normal individual. We have noted several patients with severe left main or proximal anterior descending artery lesions who have developed 10% increases in coronary resistance. However, no concurrent electrocardiographic or clinical signs of ischemia were noted.

We recently reported[40] on the effects of chronic smoking on the coronary circulation in 22 patients with angiographically normal coronary arteries and left ventricles. We found that the coronary vascular reserve, or the capacity of the coronary arteries to dilate and increase blood flow on increased demand, is significantly less in chronic smokers than in persons who do not smoke. Furthermore, we found that this decrease is more pronounced in heavy smokers. The implication of this observation is that chronic smoking affects coronary artery reactivity, perhaps through a neural mechanism, resulting in a limitation in the ability of the coronary vasculature to respond to increased myocardial oxygen demand.

SUMMARY

Cigarette smoking has important effects on both the coronary and peripheral vasculature. Both acute and chronic effects on coronary artery reactivity have been documented. These physiologic changes have potential implications for both the development of atherosclerosis as well as for the intensity of symptoms when coronary artery disease is present. A major segment of the population continues to consume tobacco despite its proved adverse cardiovascular consequences. Therefore, it is imperative for every member of the medical community to play a greater role in communicating this information to the public and assuring that it is heeded.

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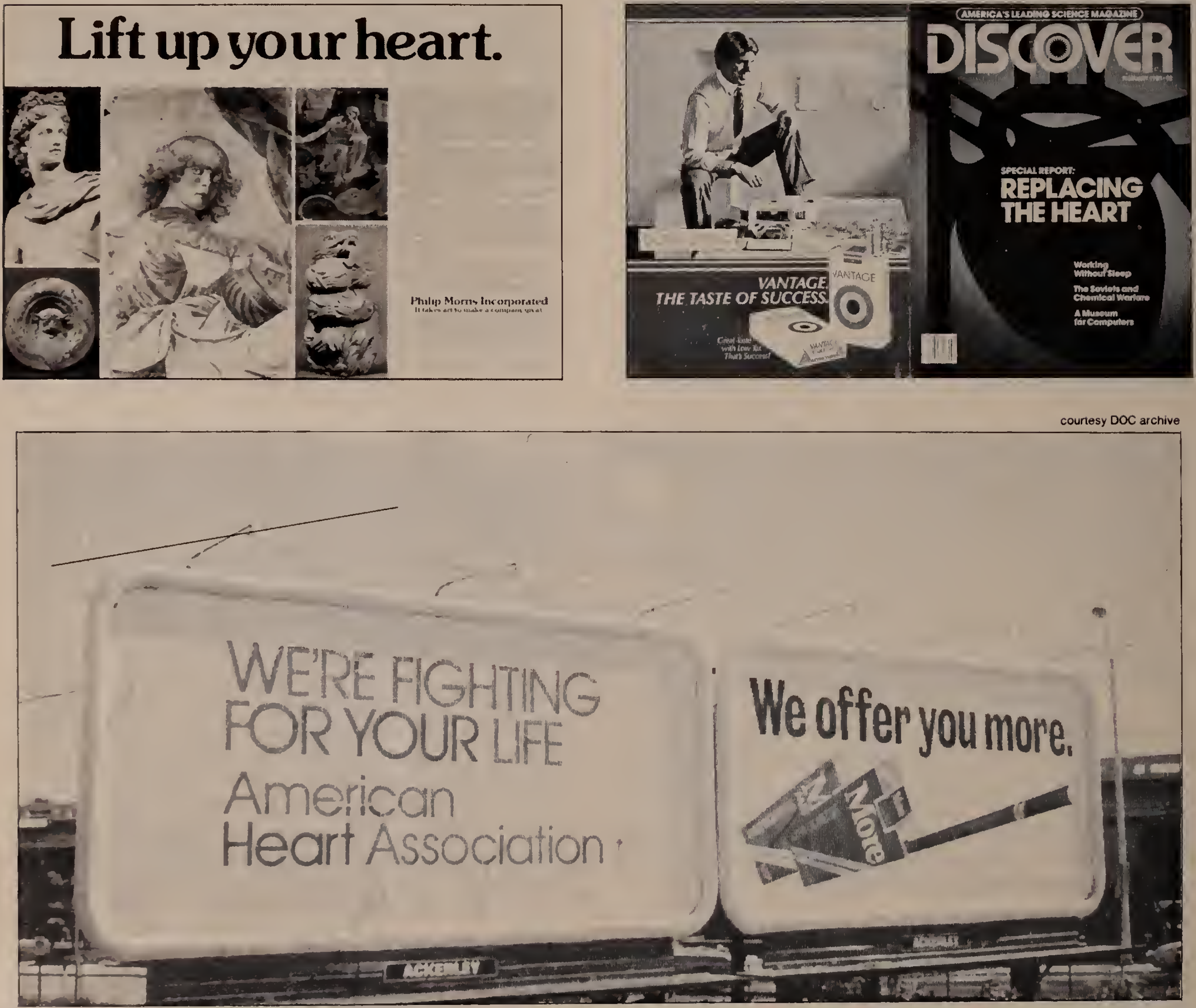
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"I've looked at life from both sides now."—Judy Collins. Top L: A cigarette-sponsored religio-cultural exhibition. Top R: Balanced coverage of a cause and a cure of cardiovascular disease. Bottom: Public service advertisement and paid advertisement.

Constituents of cigarette smoke and cardiovascular disease

DAVID W. KAUFMAN, SCD

There is now little doubt that cigarettes play a major role in the cause of heart disease, and increasing attention has been focused on which constituents of cigarette smoke might be harmful. Most of the interest has centered on nicotine and carbon monoxide, which are known to affect the cardiovascular system in potentially adverse ways.[1] Nicotine raises systolic blood pressure and cardiac output; it increases the levels of free fatty acids, which may promote atherosclerosis; and it may lead to increased platelet adhesiveness. Carbon monoxide reduces the amount of oxygen available to the heart; it decreases the threshold for ventricular fibrillation in animals and may promote atherosclerosis by increasing vessel-wall hypoxia and permeability.

It is not clear whether or not these effects are sufficient at the levels present in cigarette smoke to account for the elevated risk among smokers. Despite one earlier study[2] which indicated that low tar/nicotine cigarettes might be somewhat safer with respect to coronary heart disease, recent evidence has tended to suggest that smoking such cigarettes may not reduce the risk relative to smoking other brands. In two prospective studies, death rates from ischemic heart disease,[3] and rates of myocardial infarction (fatal and nonfatal),[4] were similar among smokers of filter and nonfilter cigarettes. In a case-control study of nonfatal myocardial infarction which linked the brand smoked to levels of nicotine and carbon monoxide published by the Federal Trade Commission,[5] the estimated magnitude of the risk was not related to the level of either substance. In all three studies, the risk was considerably higher in those who smoked than in those who didn't.

The public health importance of these findings is evident, but the biologic implications are less clear. It is possible that the nicotine and carbon monoxide in cigarette smoke are not the factors that contribute to the cause of coronary disease, and that one or more of the many other constituents is responsible. Alternatively, an effect of the two substances could be masked by differences in smoking behavior. Individuals who smoke cigarettes that are "low" in nicotine and carbon monoxide according to machine testing may actually be absorbing as much as those who smoke the "high" brands.

The latter possibility is supported by a growing body of data. It has been noted that smokers of low tar/nicotine cigarettes inhale more deeply, or otherwise smoke more intensively.[6,7] In a small study,[8] smoking behavior was a better predictor of blood nicotine levels than were the nicotine yields of different cigarettes as determined by machine smoking. Most recently, in a study of nearly 300 smokers,[9] it was observed that blood levels of cotinine, a metabolite of nicotine, were unrelated to the machine-determined levels of nicotine published by the Federal Trade Commission. The investigators concluded that "smokers of low-nicotine cigarettes do not consume less nicotine" than smokers of higher-rated brands.

It may be reasonable to presume that if nicotine intake is unrelated to the type of cigarette, then the same may be true for carbon monoxide; however, the evidence for this presumption is weaker. In one study, carboxyhemoglobin levels were highest among smokers of cigarettes with traditional unperforated filters, intermediate among smokers of newer-type cigarettes with perforated filters, and lowest among smokers of unfiltered cigarettes.[10] The picture that emerges is equivocal: cigarettes with unperforated filters were machine rated at higher levels of carbon monoxide than unfiltered cigarettes, but those with perforated filters were rated at lower levels. At the least, the data suggest that smoking the newest low-level cigarettes did not correlate with the lowest blood levels of carboxyhemoglobin.

What of the possibility that factors other than nicotine and carbon monoxide cause the smoking-related increase in the risk of coronary heart disease? Very little is known about the effects of the many other constituents of cigarette smoke. It has been suggested that cadmium might be related to hypertension,[1] although smoking itself is not known to cause hypertension. Other hypotheses include tobacco antigens causing increased endothelial cell damage, and atherosclerosis resulting from monoclonal smooth muscle cellular proliferation.[1] The latter hypothesis implies that tar might be atherogenic. There appears to be no relationship between the tar level of cigarettes and coronary disease,[5] but there is the same problem of interpretation as with nicotine and carbon monoxide.

In summary, although it is clear that cigarettes increase the risk of cardiovascular disease, the existing evidence concerning the role of particular constituents of cigarette smoke is inconclusive. There are biologic grounds to suspect that nicotine and carbon monoxide increase the risk. Although the direct evidence does not show any relationship between the machine-determined levels of these substances in cigarettes and risk, it now appears that smokers of low-level cigarettes compensate and absorb as much as smokers of other brands. Thus, the jury is still out on nicotine and carbon monoxide. It is also possible that some other substance may be the culprit, but the information is very sketchy indeed.

One statement can be made with some confidence: the newer low-level brands of cigarettes, as smoked, seem to carry the same risk of coronary heart disease as other brands. Those who smoke these cigarettes in the belief that

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they are reducing their risk of heart attacks should be warned that they are deluding themselves.

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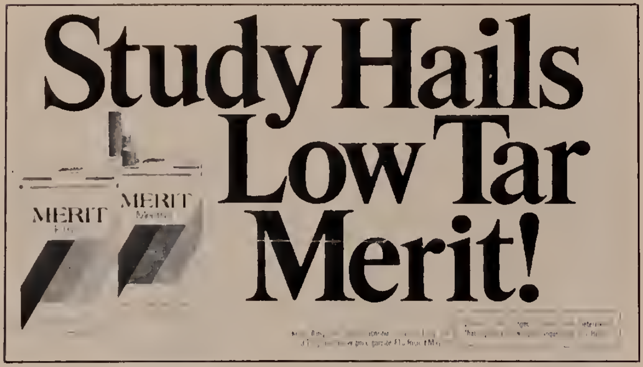
Study Hails Low Tar Merit!
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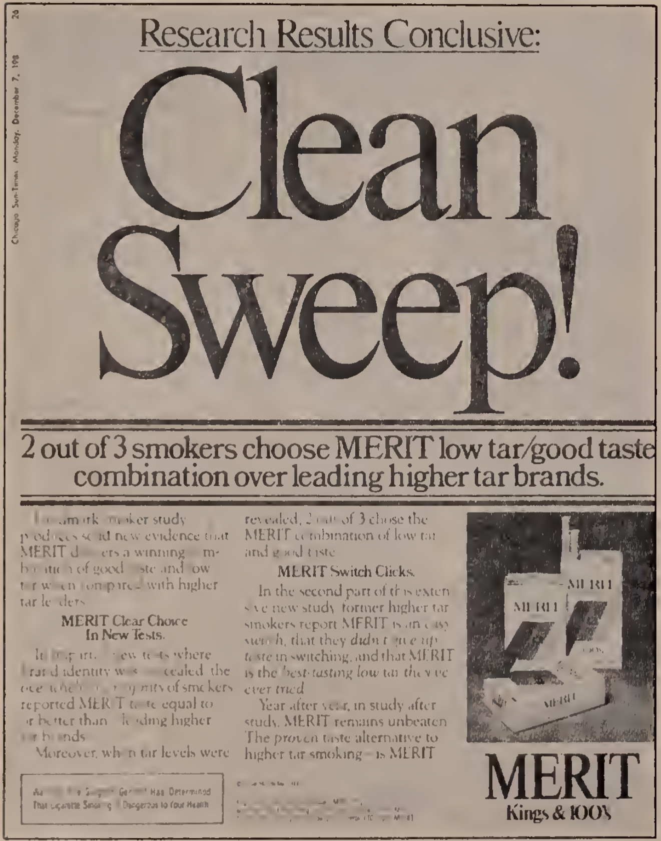
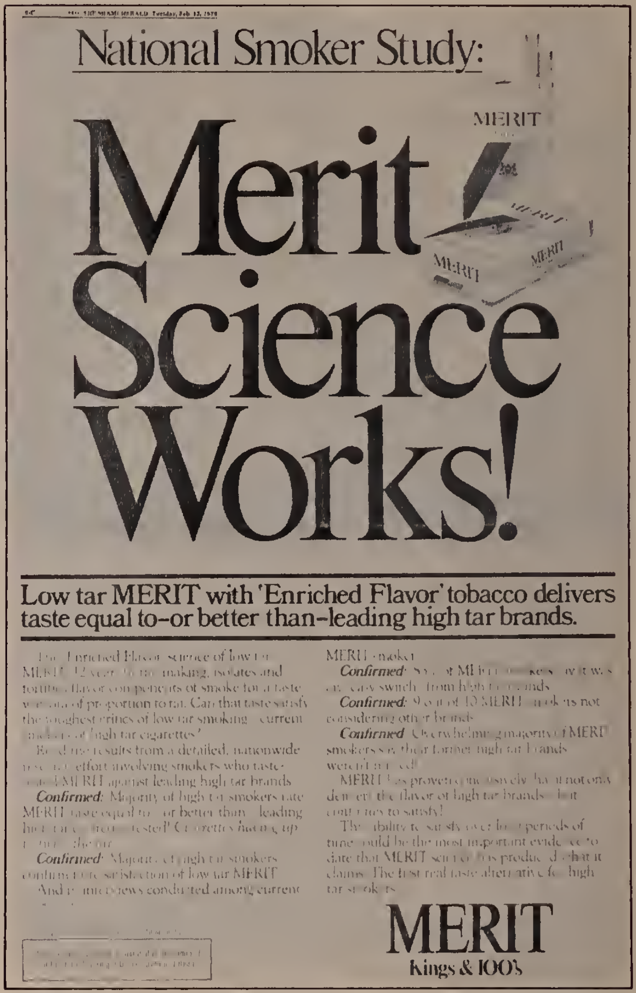

Chicago Sun-Times, Monday, December 7, 198
Research Results Conclusive:
Clean Sweep!
2 out of 3 smokers choose MERIT low tar/good taste combination over leading higher tar brands.
MERIT Clear Choice In New Tests.
MERIT Switch Clicks.
MERIT
Kings & 100's


National Smoker Study:
Merit Science Works!
MERIT
Low tar MERIT with 'Enriched Flavor' tobacco delivers taste equal to–or better than–leading high tar brands.
MERIT
Kings & 100's

Advertising headlines touting certain "low tar" cigarette brands use words such as "science," "study," and "research." The reader of such advertisements might not realize that such terms refer to *marketing* research.

“Less hazardous” cigarettes: fact or fiction?

W. S. Rickert, PhD

INTRODUCTION

Since many individuals either cannot or will not give up smoking, a great deal of effort has gone into the development and marketing of cigarettes that are potentially “less hazardous,” that is, cigarettes with reduced chemical yields and less biologic activity.[1] This “less hazardous” cigarette concept rests on three basic assumptions: (1) Large scale commercial production of cigarettes with reduced activity is feasible, (2) Given the option, those who cannot or will not stop smoking will switch to this sort of product, and (3) Persons who do switch will experience a reduced risk of smoking-related diseases compared with those who continue to smoke the higher-yield products.

Considerable effort has been expended in attempting to verify these assumptions, including monitoring of cigarette characteristics by several countries, investigation of smoking behavior, and large-scale epidemiologic studies. What follows is a limited review of the results from some of these investigations.

CHANGES IN CIGARETTE YIELDS, 1969 TO 1982

Although numerous compounds have been identified in tobacco smoke, there are only about 10 constituents that are both biologically active and present in amounts exceeding 1 μg per cigarette.[2] Of these, carbon monoxide (CO) is generally found in the highest concentration (1 to 26 mg), followed by tar (1 to 21 mg), nicotine (0.1 to 1.3 mg), aldehydes (0.08 to 1.2 mg) and hydrogen cyanide (0.04 to 0.25 mg).[3] When inhaled, the CO in tobacco smoke results in the formation of carboxyhemoglobin (COHb), so that approximately 80% of persons still smoking have COHb levels of from 2% to 8%.[4] COHb levels are better correlated than smoking history with the development of angina pectoris, myocardial infarction, and intermittent claudication; the relative risk of developing coronary heart disease is about 20 times greater in individuals with COHb levels of 5% or greater than in those with levels below 3%.[5] “Tar” is a complex mixture of compounds including a number of identifiable carcinogens and cocarcinogens, while nicotine is generally accepted as the principal constituent responsible for the cigarette smoker’s pharmacologic response.[2] Aldehydes, such as acetaldehyde, are toxic to cilia as is hydrogen cyanide (HCN), which also interferes with respiration.[6] A single cigarette delivers 40 to 250 μg of HCN.[3] In rats a dose range of 170 to 230 μg per kilogram of body weight causes unconsciousness and 590 to 640 μg per kilogram of body weight is lethal.[7]

Yields of these compounds were evaluated for the 1969 and 1978 versions of 25 brands of Canadian cigarettes representing more than 70% of sales in each year.[8] During this 10-year period significant decreases in average tar (2.5 mg), nicotine (0.34 mg), HCN (69 μg), total aldehydes (114 μg), and acrolein deliveries (5.2 μg) have been reported but no significant change in average CO yields. With respect to tar, this decline has continued with a further decrease in average yields of from 14.4 mg in 1978 to 11.7 mg in 1982. During this same period there was a marked decrease in average CO yields of 17.7 mg in 1978 to 13.0 mg in 1982. This abrupt change can be attributed to a recognition of the potential health effects of low-level CO exposure and the fact that an average consumer can obtain as much as twice the recommended industrial limit for CO exposure from his cigarette brand based on the following simple calculation.

Smoking a single cigarette with a CO yield of about 18 mg will result in average alveolar CO concentration of about 475 ppm (parts per million) for six minutes.[9] For an average pack-a-day smoker (20 cigarettes), this lung level of exposure can be expressed as 950 ppm-hours as compared with the industrial limit of 400 ppm-hours (50 ppm × 8-hour working day). Since the levels of CO in the breath of many heavy smokers often exceeds 50 ppm, a limit of 50 ppm for industrial exposure to CO is unrealistic for those who smoke. Similar arguments can be made with respect to other smoke constituents that have industrial limits.[6]

The 27% decrease in average CO yields over the past five years has come about due to major changes in the construction of most cigarette brands. In 1978, there was no significant correlation between tar and CO yields for brands whose tar yield exceeded 13 mg. As a result, for a given tar yield, CO deliveries could vary by as much as a factor of two. In addition, the higher tar brands on the average delivered less CO per unit tar than did the lower yield brands. By 1982, this circumstance had changed somewhat due to an increased use of high porosity papers and filter tip ventilation, but there is still considerable variability in CO yields for a given tar yield, particularly for the higher tar brands.

CONSUMER ACCEPTANCE

The critical factor with respect to any “less hazardous” product is consumer acceptance and, with respect to the low-tar brands, consumer response has been extraordinary. Data from the United States indicate that sales in the low-tar segment (that is, tar $\leq$ 15 mg) have tripled from 17% in 1976 to 59% in 1982.[10] A similar pattern has occurred in Canada.[8]

There are several possible explanations for this explosive

From the Smoking and Health Program of Labstat Incorporated, a project receiving financial support from Health and Welfare Canada, Bureau of Tobacco Control and the National Health Research Development Program.

Presented in part at the Fifth World Conference on Smoking and Health, Winnipeg, Canada, July 13, 1983.

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growth, but the major contributor would seem to be an increased public awareness that cigarette smoking, and in particular exposure to cigarette tar, is detrimental to health. Cigarette companies have capitalized on this perception by advertising tar levels as the basis for brand selection.

In Canada, the tobacco industry does not promote the tar yields of brands as an advertising device but rather focuses on the usage of words such as "light" (extra light, ultra light) and "mild" (extra mild, special mild, superior mild, ultra mild) to convey the impression of low or reduced yields. Unfortunately, this is misleading to the consumer since there is no general agreement as to the meaning of these descriptors in relationship to brand characteristics. As shown in the Table, it is possible to purchase a brand with no "special" designation having a tar yield of 1 mg and another described as "light" with a tar yield of 15 mg. Even within a category such as that labeled as "D" in this table, yields can vary by as much as tenfold and more. The inference is that descriptors such as "light" and "mild" are so well established in the public's mind as meaning "less" that their usage can increase sales irrespective of tar yields (Fig 1).

HEALTH CONSEQUENCES FROM "LESS HAZARDOUS" CIGARETTE USAGE

Given the now widespread usage of lower-yield brands, there have been several large-scale investigations into the resulting consequences for the health of smokers, and with respect to lung cancer they are significant. One major 12-year study of more than 1 million smokers reported that smokers of low-tar/nicotine cigarettes (tar $\leq$ 17.6 mg) had a 26% lower lung cancer mortality than those who reported smoking high tar (25.8 to 35.7 mg) cigarettes.[11] From this same study, with respect to overall mortality, there also appeared to be a relationship to stated brand yield since smokers of medium-tar (17.6 mg to 25.8 mg) had a 9% lower mortality rate than did smokers of high-tar cigarettes. The differences between high- and low-tar, and high- and medium-tar groups were reported as "highly significant." [12]

With respect to heart disease, the results are far less encouraging, since several studies have concluded that men who smoke cigarettes with reduced yields do not have a lower risk of myocardial infarction when compared with those who use the higher-yield products.[13,14] In summary, then, although there may be a lower risk of death due to lung cancer resulting from the usage of lower-yield cigarettes, the overall risks to health are far less dramatic than would have been predicted based on changes in tar deliveries alone. In the hands of many smokers, the so-called "less-hazardous" product carries much the same risk as that associated with the usage of the higher-yield brands.

NOW
EVEN
MILDER

FIGURE 1. Point-of-purchase advertisement for a brand of Canadian cigarettes.

A partial explanation for the discrepancy between anticipated and observed reduction in lethal risk is a tendency toward increased consumption, which often occurs on switching to a low-yield brand.[15,16] This increase has been ascribed to a nicotine dependency which may also cause more subtle changes in smoking behavior. This conclusion results from studies of cigarette yields as measured by smoking machines in relation to smoke absorption estimated from levels of smoke constituents in body fluids. For ex-

A Comparison of Brand Descriptors and Tar Yields of Brands of Canadian Cigarettes*

Category	Brand Designation	No.	Tar Yields (mg) Average	Median	Range
A	Light	18	11.1	11.5	5-15
B	Ultra Light, Extra Light	4	6.0	7.5	1-8
C	Mild	2	12.5	12.5	12-13
D	Extra Mild, Special Mild, Ultra Mild, Superior Mild	23	6.3	4.0	0.4-13
E	Others	73	13.9	14.0	1-18
	TOTAL	120			

* List produced by the Canadian Tobacco Manufacturers Council, March 31, 1983.

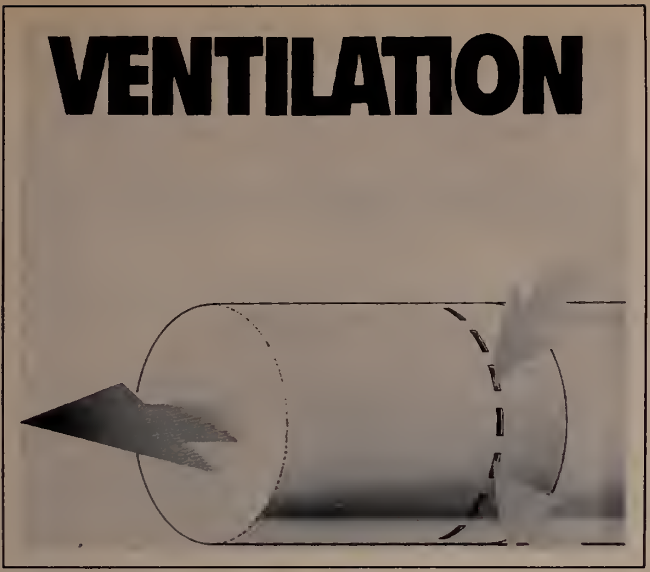
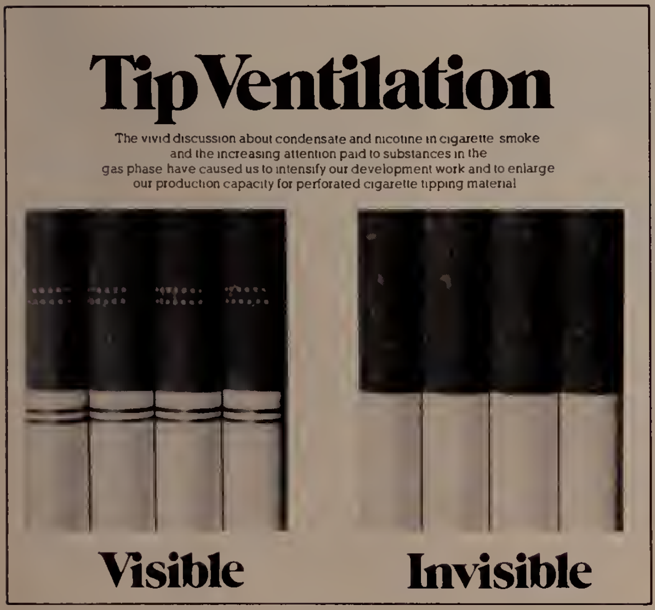


FIGURE 2. Fluted filter construction: vents to promote air dilution.

ample, if a cigarette is smoked in a manner similar to the conditions used in cigarette testing then the stated yield of HCN should provide a reasonable measure of the amount of HCN to which a smoker is exposed. However, in one study involving 240 subjects, no correlation was found between brand yield and smoke absorption after standardizing for level of consumption.[17] Others have reported similar results.[18]

The question of nicotine compensation also has been approached using volunteers who were made to switch to progressively lower-yield brands. Measures of smoking exposure such as blood COHb, serum cotinine, and plasma thiocyanate all demonstrated that more smoke was absorbed than would have been predicted from the values on the packages. In fact, the lack of major differences between the treatment and control groups in this study suggested that most subjects obtained just as much nicotine from the so-called less-hazardous products as they did from their original brand.[19,20] For most subjects in these studies, switching to low-yield brands did not result in a significant decrease in the amount of smoke absorbed, due primarily to a tendency to increase puff volume and/or depth of inhalation when such products are smoked.[21] Unfortunately, these maneuvers are an unconscious response to a nicotine dependency and, as such, are difficult for the smoker to control. However, there are more obvious ways to increase cigarette yields. For example, one major factor that most low-yield brands have in common is the presence of air dilution devices, an example of which is shown in Figure 2. This filter type is used on a number of US cigarette brands and presents some difficulty with respect to appropriate conditions for testing since blocking of these vents would allow a smoker to obtain more from a cigarette than the stated contents would imply.[22] Fifty percent of those who smoke low-tar cigarettes admit to blocking the holes; thus, there could be little, if any, change in the risk of smoking-related diseases.[23] But although consumers can be warned of the danger of hole blocking, the vents on many brands are all but invisible to the human eye, as illustrated in Figure 3.



The vivid discussion about condensate and nicotine in cigarette smoke and the increasing attention paid to substances in the gas phase have caused us to intensify our development work and to enlarge our production capacity for perforated cigarette tipping material

FIGURE 3. Laser perforating as a means of reducing the visibility of cigarette ventilation. (Source: Advertisement in Tobacco Reporter, October 1981. *Deutsche Benkert* GMBH and COKG.)

The extensive use of air dilution devices to effect reduced yields has other consequences as well. Although mainstream yields to the smoking machine are reduced by these devices, sidestream yields to the environment are not. For example, it has been reported that under standard testing conditions a 3-mg tar cigarette produced a total of 39 mg of tar, as did a 17-mg cigarette. Similarly, with respect to carbon monoxide, a 3-mg cigarette produced a total of 56 mg of CO, a value close to that recorded for a 17-mg CO cigarette. Thus, when mainstream and sidestream yields are added together, the total appears to be largely independent of cigarette tar classification.[24] This implies similar hazards to those exposed to the smoke of others regardless of whether or not the brand being smoked is described by the manufacturers as "light" or "mild."

Unfortunately, most persons who still smoke cigarettes do not realize that the numbers so heavily exploited by industry are based on the average smoking habits of a male smoker of nonfilter cigarettes as determined 25 years ago.[25] Today, fewer than 10% of all smokers in the United States appear to follow this pattern.[26] Thus, on this basis alone, it is not surprising that yields to the smoker will bear little resemblance to the yields to the smoking machines that have been used as the basis for comparisons in epidemiologic studies.[11-13] In addition, human smoking behavior is so variable that it is questionable as to whether or not any single set of conditions for machine smoking will provide "reasonable" values for smoke constituents.[27] For example, recently it has been reported that a cigarette brand that delivered 39 μg of HCN under standard conditions produced from 5 to 241 μg HCN when tested under conditions defined by observations of current smoking behavior. This range for a *single cigarette brand* is greater than the range recorded for all 115 brands of cigarettes that were tested.[28]

With respect to the tobacco industry, the "less-hazardous" cigarette program has focused to a large extent on pressuring manufacturers to reduce yields as measured by smoking machines. But, given the ease with which a smoker can modify these yields, the vanishingly small-tar deliveries of many brands can only be guaranteed to smoking machines that smoke each and every cigarette under "standard" conditions.

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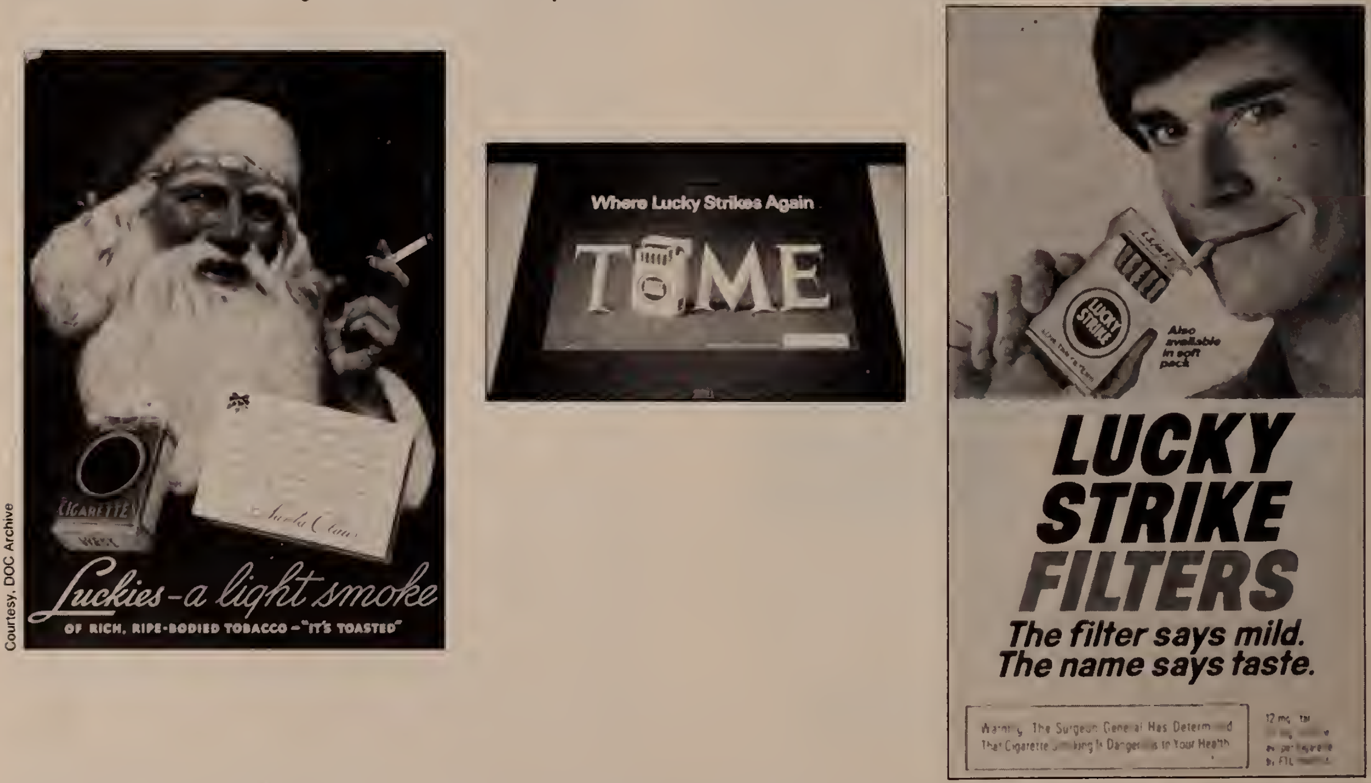
CIGARETTES
Luckies—a light smoke
OF RICH, RIPE-BODIED TOBACCO—"IT'S TOASTED"
Courtesy, DOC Archive
Where Lucky Strikes Again
TIME
Also available in soft pack
LUCKY STRIKE FILTERS
The filter says mild. The name says taste.
Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health
12 mg. tar

L: In 1936 even Santa smoked Luckies; the word "light" could describe an unfiltered cigarette with over 30 mg tar. Middle: In 1983 promotion for the revived brand received a boost from *TIME*. R: Young man in newspaper sports section advertisement tries his luck with this "mild" smoke.

The economics of smoking: dollars and sense

KENNETH E. WARNER, PHD

The Surgeon General has identified cigarette smoking as the nation's most significant source of preventable morbidity and premature mortality.[1] The annual death toll—some 350,000 people—exceeds the number of American lives lost in all of the wars this country has fought in the 20th century.

The economic toll of smoking is both less familiar to the general public and less readily comprehensible. Smoking-related diseases annually consume approximately $15 billion in medical care resources, or more than 5% of the nation's total direct health care costs, and cause a productivity loss (due to excess morbidity and disability and premature death) of $34 billion. (These and succeeding dollar figures are updated by the author from the referenced sources to approximate 1983 dollars.) The sum of these numbers—$49 billion—may be considered a first approximation to the social economic cost of smoking.[2] If New York's share of this burden is proportionate to its population share, this means that smoking costs the State and its residents approximately $4.4 billion each year. In ignoring important economic intangibles, such as the cost of pain and suffering, all of these figures must be considered a substantial underestimate of the true social cost of smoking.

A figure in the billions of dollars is difficult for most people to comprehend. To put it into perspective, the measurable annual social cost of smoking per capita is on the order of $200. Medical care necessitated by smoking-related illness translates into an annual economic burden on the typical nonsmoking, working-age adult in excess of $100 in taxes and health insurance premiums to pay for the health care needs of the victims of smoking.

If smoking is so socially costly, how can one explain the fact that over the years the federal government has spent hundreds of millions of dollars subsidizing the growing of tobacco, while the Office on Smoking and Health and its predecessor, the National Clearinghouse on Smoking and Health, have received a total of only $33 million to convey the health hazards of smoking to the public? Why, two decades after the original Surgeon General's report,[3] do large pockets of ignorance about the health effects of smoking remain?[4] Why is the nonsmoking majority unaware of the expenditures they must make to support the habits of the smoking minority?

The answers lie in the unique interface of tobacco economics and politics, a powerful phenomenon driven by the former and converted into social impacts by the latter. Smoking is big business. In 1982, consumers spent close to $25 billion on cigarettes. When the indirect expenditures associated with cigarette sales are added in, the total annual contribution of cigarettes to the national economy exceeds $60 billion, or roughly 2.5% of the gross national product, accounting for some 2 million jobs, 2.5% of total private sector national employment.[5] The national economic significance of tobacco is further illustrated by the fact that, in 1976, Americans spent one and a half times as much on tobacco as they did on drugs and sundries, and 40% of what they spent on new automobiles.[6]

These economic statistics offer some insight into the significance of cigarettes, but they do not begin to explain the political power of tobacco. The latter results primarily from the *concentration* of economic interests and their historically successful translation into political influence. The process is circular, with this political influence having fed the economic interests of the industry for half a century. To gain some perspective on the nature and consequences of this political-economic force, consider the following[6,7]:

- Tobacco growing is highly concentrated geographically, with two states (North Carolina and Kentucky) accounting for half the national acreage and the top six states, all clustered in the South, accounting for three-quarters. The annual raw crop value of tobacco in these states ranges from $150 million to close to $1 billion in North Carolina. In no other states does the value of raw crop exceed $50 million.

- Several hundred thousand farm laborers work on the close to 100,000 tobacco farms, though the majority of nonowner laborers typically work on tobacco farms for under 25 days per year. By contrast, cigarettes are manufactured by only six major firms, two of which account for over 60% of retail sales.

- In addition to subsidies through the price support system (reduced but not eliminated by recent legislation), holders of allotments benefit substantially from a system that legally restricts tobacco growing. These two features make tobacco farming one of the most anticompetitive structures in US agriculture and industry. Yet such vocal proponents of free enterprise as Senator Jesse Helms consistently and vigorously support this self-serving, anticompetitive system.

- One of the results of this system is that the gross income per acre of tobacco can range from $3,000 to $4,000. By way of comparison, the comparable figures for corn and soybeans are, respectively, $150 and $300.[8]

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The force of these concentrated and intense economic interests combined with the seniority system in Congress, which historically has disproportionately produced southern leadership, has led to decades in which passage of major federal antismoking legislation was unthinkable. Nonsouthern legislators learned quickly that they could garner votes on issues of importance to them in exchange for support of pro-tobacco votes; this vote-trading is alive and flourishing, quite openly, in 1983.[8]

Similarly, the economic muscle of the tobacco industry—which invested some $1.5 billion in cigarette advertising last year—has translated into anemic coverage of smoking-and-health issues by the nation's media. Media that depend heavily on tobacco advertising, including newspapers and magazines, are victims of both implicit and explicit intimidation intended to suppress such coverage.[9] The product diversification of the cigarette manufacturers means that the threat of loss of advertising, as a response to antitobacco coverage, extends to beer, soft drinks, crackers, catsup, and dog food.

Despite these discouraging situations, there are new circumstances that give reason for cautious optimism. Competition from tobacco grown overseas is making the price support system less economically tenable. More important, the politics of smoking have been changing. Last year, pressure from an invigorated antismoking lobby forced tobacco legislators to support a "no net cost" bill which was passed into law. While the purported intent of the bill—to eliminate the taxpayers' subsidization of tobacco—has not been entirely realized, the symbolism of the law is clear and important. As of this writing, a serious battle is being waged in Congress to strengthen the health warning system on cigarette packs. More legislation can be expected.

The traditional antismoking forces, including the major national voluntary health associations, have finally banded together to constitute the first serious antismoking lobby in Washington. Perhaps equally important, if much more subtle, has been the shift in the nation's attitude toward smoking. Concerns about "passive" smoking and the simple right to breathe clean air, combined with a growing appreciation of the health and economic costs of smoking, have created a social climate in which the smoker no longer asks, "Would you like a cigarette?" Today the question is, "Do you mind if I smoke?" As this question is increasingly answered in the affirmative, Congress will gradually catch up with a public that is kicking its collective cigarette habit.[10,11]

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THE INDIVIDUALISTIC LEGACY

The dominant perspective that has defined the issues and directed the tasks of health workers in attempting to reduce smoking prevalence has been individualistic, viewing smoking through informational, educational and motivational programs directed at individuals or small groups. Because the ravages of smoking finally present as medical problems, and because epidemiology as a branch of medical science was first able to describe the relationship between smoking and disease, the great part of smoking control activity has been overseen by the medical profession. The reports of the Royal College of Physicians and the US Surgeon General stand as landmarks to the widespread social recognition of smoking as a major health epidemic but also to the prevailing and limiting definition of the problem as fundamentally medical.

Accordingly, smoking control has been dominated worldwide by medical interests. Medical agencies have tended to fund only work that fits in with established notions of what the role of medicine ought to be—biochemical, clinical, individualistic. Interventions are often sterile, over-theorized and trivial, having been stultified by research conditions that enable peer acceptance in the scientific, conferencing community. Scarce monetary grants capable of financing substantial interventions are emasculated by up to a third going to support the research interests of academic hoop-jumpers. Such notions of "the way to go about it" are recycled in medical and the less radical public health curricula and have effectively limited the role of medicine in addressing smoking control in its political, economic and cultural dimensions.

—SIMON CHAPMAN
The Lung Goodbye—A manual of tactics for
counteracting the tobacco industry in the 1980s,
Sydney, Australian Consumers Association, 1983.

The politics of tobacco: curse and cure

COMMISSIONER MICHAEL PERTSCHUK*

If a prescription for a cure to the smoking pandemic could be made up, it would likely comprise 10% medical and behavioral ingredients and 90% political effort. Indeed, a model national cure has been available for the taking for years, in the splendid green-clad pill published by the UICC (International Union Against Cancer) *Guidelines for Smoking Control* (Technical Report Series, Vol. 52, Edited by N. Gray and M. Daube, Geneva, Switzerland, 1980). That it is a practical prescription has been established through the experience of the Scandinavian countries, which after years of struggle have emerged as national laboratories for rational, successful smoking-control programs. But the rest of the world lags far behind: physiologically, economically, ideologically, and politically addicted to the cigarette. And what an ecumenical addiction it is: liberal and conservative regime; democracy and dictatorship; socialist and capitalist—all equally debilitated in disarming the cigarette.

In moments of discouragement we tend to dismiss this failure of national will as the inevitable product of the awesome and diabolic political power of tobacco.

Social psychologists have charted the chronic tendency of warring nations to distort both the motives and power of their adversaries. As Ralph K. White has observed, "Always there seems to be a tendency to exaggerate the virtues on one's own side and the diabolical character of the opposite side, and especially of the leaders on the opposite side."

We need to resist a diabolic view of our adversaries; that way leads to despair and resignation. And the truth is that tobacco interests are not omnipotent. To be sure, they have powerfully retarded progress in national smoking control programs. But they, too, have lost battles. Reluctantly, they have been forced to give up cherished marketing tools and to withdraw from markets among important population segments. Indeed, they face an inexorable pattern of long-term, steady retreat.

DISPASSIONATE ACTIVISM

What is critical is that there be a cool assessment of the sources and strengths of the tobacco industry's political power, and the power of those who oppose tobacco, and that strategies be based on sound political analysis. Neither wishful thinking nor the exaggerated bloating of the power of tobacco serves the public interest.

Of course, the political power of the cigarette does rest on a broad foundation, and greed is not its only motivating force. When the budget director of Brazil excoriates tobacco companies for their lack of aggressiveness in promoting the sale of cigarettes, he is rightly condemned by a committee of leading physicians. But he is not in the pay of the cigarette companies. His is the anguished voice of a regime desperate for cigarette tax revenues, which make up ten percent of the national Brazilian budget.

The Republic of China can hardly be viewed as the handmaiden of the multinational cigarette companies. Yet in that "rational, scientific" socialist country the cigarette tax is a prime means of capital formation, a central economic fact that largely accounts for the tepid government efforts to discourage smoking.

In the United States, CBS-TV produced a report on the politics of smoking, entitled "The Golden Leaf," in September 1982, one of the first such documentaries on television. Some health advocates were disappointed because the program did not revel in shots of slick lobbyists slinking through the corridors of power in Washington. Instead the camera dwelled on small tobacco farmers in North Carolina, where it was pointed out that the farmer reaps $3,000 an acre for his tobacco, over 10 times the value of an acre of corn. The truth is that if the Washington lobbies and public relations firms were to disappear, other forces would remain: dozens of congressmen whose farmer-constituents are dependent on tobacco, school systems sustained by tobacco taxes, large and small magazines and newspapers surviving on cigarette advertising revenues, advertising agencies, small news stands, wholesalers, retailers, truckers, and tobacco worker unions, all dependent on the maintenance of the cigarette habit.

Perhaps an equally formidable block to effective national action is the anger of people who smoke. As Lee Fritschler observes in *Smoking and Politics* (New York, Appleton-Century Crofts, 1975), "Smokers dislike being told, particularly by politicians, that their pleasures could be injurious to their health. Consequently, health-oriented politicians are likely to devote their time to more popular activities."

Cultures and myth maintain a hold independent of economic interests. In China, Chairman Mao's cigarette box is displayed at a shrine along with other cherished artifacts. The offering of the cigarette as a symbol of hospitableness dies hard, as does the folk wisdom, especially for leaders under stress, that "smoking quickens the senses."

Tobacco is also, whether we like it or not, a solace for people in misery. In Krakow, Poland, a young guide was chastised for smoking by a visiting American congressional representative, whereupon she replied quietly, "Poland is a very poor country and we have few consolations." These myths, legends, and addictions buttress passive popular resistance to national smoking-control programs.

To rationalize is human. And those dependent on tobacco have seized on powerful symbols in their need to rationalize their economic role: they are the defenders of freedom—

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* The views expressed in these comments are those of Commissioner Pertschuk and most likely do not reflect the views of the Federal Trade Commission.

Based on a presentation delivered at the Fifth World Conference on Smoking and Health, Winnipeg, Canada, July 11, 1983.

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freedom of choice. They are in the thick of the fashionable neoconservative revolt against regulatory programs characterized as oppressive, bullying government, run by unelected bureaucrats endlessly intervening in the lives of individuals. They are defenders against moral zealotry. They evoke history and tradition. "Tobacco," boasts Senator Wendell Ford of Kentucky, "is part of the character of Kentucky: beautiful women, fast horses, bourbon and cigarettes."

Do they believe it? Cognitive dissonance suggests that this would be so. There are fire and passion in the voice of cigarette spokesmen defending their business, and it is sadly true that the conscientious objector or defector from the cigarette camp is rare.

THE OPPONENTS' PSYCHE

It is important to understand how the cigarette industry's defenders view themselves and their opponents. They see themselves as victims of regulators' hunger for power and puritanical zeal. It may be hard to visualize Philip Morris Incorporated or R.J. Reynolds Industries as victims. But it is nonetheless the way in which they view the world. They are genuinely frightened, not only by the public health establishment but by other industries. They view—probably with some validity—the enthusiastic embrace by textile plants or asbestos companies of antismoking programs as a ruse for diverting attention away from other health hazards at the workplace. They see themselves as weak and the opposition as powerful. And although that may sound absurd, that is their perception and is part of the political reality that must be recognized. There is also a germ of truth in it.

For just as the political supporters of the tobacco industry are not all fairy tale villains, although their cause may be villainous, neither are they invincible. And public health activists possess potent political resources of their own. Foremost among these is the power of scientific truth, and the truth is that the cost to society of cigarette smoking dwarfs all other public health hazards. When the Surgeon General of the United States Public Health Service proclaims, as Dr. Koop did in his 1982 report, that "cigarette smoking is clearly identified as the chief preventable cause of death in our society, and the most important public health issue of our time," his message rings with authority and potent political force. Public health leaders are credible in large part not only because of their scientific credentials, but also because they have no apparent economic self-interest in the cause they espouse. Over many cultures and political systems, their symbols are stronger, more persistent, and deeper than the industry's: the defense of children from commercial exploitation; the defense of family from the premature loss of father or mother; the relief of overburdened health care systems; the preservation of labor productivity from the debilitation due to smoking-related diseases. The case against smoking rests not only on traditional symbols relating to childhood, family, and productivity, but on emerging symbols of political potency as well, such as the rise of the health ethic reflected in exercise, diet, and the care of one's own body: Anyone who knows anything about health does not smoke. There also has been a dramatic shift in the prevailing view of public smoking from the assumed right of the smoker to light up virtually anywhere, to the emerging right of the nonsmoker to a pollution-free public environment.

Finally, the very power and influence of the tobacco interests themselves contain the seeds of tobacco's political vulnerability. More often than not their crude expressions of greed and overreaching political power furnish the fuel for public outrage. When a Federal Trade Commission report released by a congressional committee quoted tobacco marketing specialists coolly advocating exploitation of the sexual and social insecurity of adolescents, that story was national news. When a congressional committee dominated by tobacco-state representatives favorably reported a bill in 1970 which "prohibited the states and federal agencies from taking any action on cigarette advertising," Fritschler reports, "the reaction in the Senate and elsewhere in government was severe. The tobacco interests were regarded as having overplayed their hand." The cumulative expressions of public and editorial outrage contributed to the withdrawal of cigarette advertising from television and radio in 1970. This was not an unalloyed victory for public health interests, but it was far better than the bill first bludgeoned through the committee by tobacco's representatives.

Thus, the public health forces are not lacking in political resources. Yet political power, even benign political power, is not self-executing.

The UICC's *Guidelines for Smoking Control* is no utopian fantasy. It contains a practical, informed blueprint for national political strategies to achieve attainable goals. But its effectiveness depends greatly on the willingness of public health advocates to shed fastidiousness toward political involvement and to recognize that the press conference, the campaign, and the ballot box hold a potential for the saving of lives lost to smoking as great as any combination of medicines. Papers and speeches decrying the power of the tobacco lobbies and the unresponsiveness of public officials may be satisfying to the soul of the speaker. But if the work of the public health advocate ends with the speech or the paper, it is as if the physician were to end his treatment with his diagnosis.

ACHIEVABLE OBJECTIVES

A dispassionate view of the motives, perceptions, strengths, and vulnerabilities of the various tobacco interests is a necessary first step toward the development of sound national political strategies to advance smoking-control programs.

Even public health advocates need to remind themselves that their real end objective is the reduction of smoking-related disease, *not* retribution against all those with an economic stake in tobacco. In the United States, for example, the mere fact that tobacco farmers and their representatives passionately defend the tobacco price-support program should not trigger automatic public health opposition to the program. It should be recognized that the federal government in the United States does not actually "subsidize" cultivation of tobacco. Rather it *restricts* the production of tobacco as part of a program for maintaining the price of tobacco and hence the income of tobacco farmers.

Nearly all smoking-control advocates in the United States warmly embraced an increase in cigarette taxes last year in the belief that a rise in the price of cigarettes will discourage smoking. But it may be equally in the interest of public health to keep the price of tobacco, the raw ingredient of cigarettes, high. The result of abolishing the tobacco price-support program might well be a return to the conditions that spawned the program in the great depression: overproduction of tobacco and a precipitous price drop, impoverishing and transforming tobacco farmers into virtual economic serfs of the cigarette companies.

If public health advocates were to drop their opposition to tobacco price supports, they could enhance the opportunities for the passage of legislation strengthening cigarette warnings and other restraints on promotion. How does this translate into practical politics? Legislators have an incurable aversion to hard choices; they invariably seek to split the baby down the middle: "I can't be with you on this vote, but I'll support you on that one." When a Kentucky congressman says to his friend and colleague from neighboring Missouri: "I need your help on tobacco, it's my people's economic lifeblood," few congressmen will look him in the eye and say, "Sorry, I'm going with the public health." But many would be comfortable saying: "O.K., I'll go with you on price supports, but I can't vote against stronger warnings."

A MATCHSTICK PENTAGON

Political scientists speak of the ability of certain entrenched economic interests to maintain control of public policy through "iron triangles." Thus the tobacco industry—a concentrated, organized, and politically sophisticated economic interest—retards change through close political alliance with government agencies, principally the Department of Agriculture, which has nurtured the tobacco industry for decades, and key congressional leaders and committees such as the agriculture committees of Congress.

To combat these iron triangles, the public interest often requires the initiative of a countervailing political geometry. Although its configuration may vary from country to country and issue to issue, its most common form might resemble a pentagon. The first side, or base, requires public health, education, and consumer authorities who are prepared to provide a solid foundation of scientific and behavioral expertise to support smoking-control efforts, to respond to the propaganda and dissembling of tobacco spokesmen, and to take the initiative in launching public policy initiatives.

A second side is formed by elected representatives who are willing to step forward and lead.

A third side must be supplied by organized communities of concerned professionals and ordinary citizens. At the national level are the health charities and public health organizations. At the local level there are medical societies, parent-teacher associations and nonsmokers' rights groups.

A fourth side of the pentagon requires the existence of a critical network of public interest lobbyists—typically, lawyers, doctors, teachers, and students who share a zest for combat in the arena of public policy formation and for development of the political skills, if not yet the numbers of resources, to match those of the most sophisticated tobacco lobbyists.

The fifth and perhaps most critical side of the pentagon is represented by journalists not only dedicated to the rooting out of truth, but determined to overcome the not uncommon resistance of publishers and editors to stories inconvenient to advertisers.

The alertness and independence of the mass media will ultimately determine whether the cigarette story is told in terms of the spurious but seductive symbols offered in defense of a beleaguered industry, or by the symbols of public health and concern whose violation properly evokes public outrage.

This pentagon—perhaps visualized as a matchstick configuration to contrast its fragility with that of the more solidly welded iron triangle—is slowly becoming bound together by an international network of concerned citizens.

In the United States at this moment one can glimpse the effective workings of the matchstick pentagon, as Congress moves toward the strengthening of health warnings in cigarette advertising. The initiative in unmasking the ineffectiveness of the current warning and in presenting a blueprint to Congress for stronger warnings came from the Federal Trade Commission, but the history of the smoking-restraint effort in the United States over the last two decades has also been marked by uncommon courage from successive Surgeons General, the Federal Communications Commission, and cabinet secretaries such as Joseph Califano, Jr. The legislative initiative has been taken by outstanding public health advocates in the Congress over the last 25 years from both parties, including Representatives John Blatnik, John Moss, Robert Drinan, Henry Waxman, and Don Edwards and Senators Maurine Neuberger, Warren Magnuson, Frank Moss, Edward Kennedy, Bob Packwood, Thomas Eagleton, and Orrin Hatch. The voluntary health associations have hired skilled lobbyists to help develop and implement a sound strategy for strengthening legislation aimed at cutting the death toll due to smoking.

The tobacco industry is rich and powerful. But it is also vulnerable to astute political action. Like it or not, lobbying in support of smoking-control programs is a requisite public health need. The ultimate political weapon of the public health forces is broad, sustained public outrage provoked and stimulated by a responsible press, tempered by strategic realism. No public health issue offers greater grounds for such public outrage. And public outrage, channeled intelligently, can move mountains.

ALL'S FAIR

So where do we go from here? I believe we go to war. We recognize quite clearly that this is a war with a determined enemy . . . The tobacco industry has demonstrated in every continent that it has forfeited any right to be regarded as anything other than the opposition . . . The merchants of death are the manufacturers, and we must confront them on every battlefield, whether it be health, political, social, environmental, economic, or any other.

—MIKE DAUBE
Closing remarks, Fourth World Conference
on Smoking and Health, Stockholm, Sweden, 1979

Why Uncle Sam is still smoking

JAMES H. LUTSCHG, MD

Tobacco and government have been closely tied since the beginning of this nation. George Washington, who grew tobacco in Virginia, is honored with his likeness on a package of tobacco still available today. For years Congress Perfecto, Senate Bouquet, President Extra, and Uncle Sam were popular cigar brands (Fig). The formation in 1958 of the Tobacco Institute, the main public relations and lobbying arm of the tobacco industry, merely formalized the long-standing alliance of cigarette manufacturers, agricultural officials, and congressmen from tobacco-growing areas. The staff of the Tobacco Institute is headed by a former congressman. More than 100 congressmen from states that grow little or no tobacco received funds from the Tobacco People's Public Affairs Committee (TPPAC) in 1979, and more than 200 of the current members of Congress received PAC funds from the TPPAC and the tobacco industry oligopoly during the elections of 1981 and 1982. Honoraria for speaking at tobacco industry functions represent another source of funds to congressmen, including the Speaker of the House of Representatives, Thomas P. "Tip" O'Neill, Jr (D, Massachusetts).[1]

Political connections of the tobacco industry with the Executive Branch, especially in the Carter administration, have not been uncommon. For instance, the director of corporate relations at Philip Morris took a full-time leave to serve Mr Carter's campaign in 1976 as liaison with the business world.[2] President Carter appointed a board member of Philip Morris as chairman of the President's Council on Physical Fitness and Sports.

In 1980, Ronald Reagan stated, while campaigning in North Carolina, "My own Cabinet members will be far too busy with substantive matters to waste their time proselytizing against the dangers of cigarette smoking." In 1981 the Department of Health and Human Services (HHS) canceled a new kind of advertising campaign aimed at teenagers and featuring actress and model Brooke Shields. One of the officials responsible for snuffing the campaign (allegedly because the Madison Avenue approach and Ms Shield's line, "Smokers are losers," would be offensive) had previously served as a legislative aide to Senator Jesse Helms (R, North Carolina). In 1982, the budget of the Office on Smoking and Health of HHS was cut from $2.6 million to $1.9 million—less than 1/600th of the estimated $1.3 billion spent advertising cigarettes in 1982.

The National Cancer Institute's (NCI) record on smoking is disappointing at best. At a time when lung cancer rates were soaring, the NCI's major smoking research project was a $40 million effort to develop "less hazardous cigarettes"—the assumption being that people will continue to smoke regardless of warnings. This effort was finally abandoned, and its project director now works under a grant from Brown & Williamson (BAT) for the tobacco industry-financed Franklin Institute. (The cigarette company had earlier offered to endow a $400,000 chair for this individual at a medical school in Washington, DC.)

In NCI's status report of December, 1978,[3] it was noted that in 1977 there had been 354,200 premature deaths related to cigarette smoking, and it was estimated that there had been over four million premature deaths related to cigarette smoking since the issuance of the Surgeon General's initial report in 1964. Yet a privately published anniversary book, *Decade of Discovery: Advances in Cancer Research 1971-1981*[4] (aimed at promoting the NCI among the affluent and influential), did not acknowledge the failure of research to lessen cigarette-related cancers. Included in this publication was a half-page graph labeled "Five-Year Relative Survival Rates for Whites for Seven Leading Cancer Sites." The seven sites depicted all showed five-year survival rates ranging from 45% to 81%. Lung cancer, the leading cancer site, was omitted from the graph. Also not mentioned was the five-year relative survival rate for lung cancer (less than 10%), unchanged in the last 40 years.

Similarly, the NIH Publication No. 82-1635 *What Black Americans Should Know About Cancer* offers to dispel a number of myths. To the rhetorical question, "What are the chances of surviving cancer?" the booklet responds:

> Today, the chances of surviving cancer are better than ever before. For example, the five-year survival rate for patients with cancer of the uterus has risen to 81%, breast 68%, prostate 63%, bladder 61%, colon 49%, and rectum 45% . . .[5]

The leading cancer site is omitted, as are the survival rates for several other cancer sites associated with cigarette smoking (larynx, esophagus, and pancreas).

Governmental regulation of carcinogens has avoided cigarettes. In 1981, Congress' Office of Technology Assessment issued *Technologies for Determining Cancer Risks from the Environment*, listing 102 substances regulated as carcinogens in the United States. Tobacco is not listed. This same publication estimates that approximately one third of all malignancies are due to smoking.[6]

The value of the mandated Surgeon General's warning must be questioned in light of evidence that only one in fifty persons buying cigarettes acknowledges reading it.[7] A single component of cigarette tar, benzo(alpha)pyrene, has 50,000 times the experimental carcinogenic potency of saccharin.[8] Yet the word "cancer" appears in the warning on "diet" drinks and not on cigarette packs. Packets of snuff, cigars, or loose tobacco for hand-rolled cigarettes (all increasingly advertised to a young male audience) contain no warning at all. Even candy bars must carry a label listing ingredients and additives, but there is no such requirement for cigarettes. In 1984, 100,000 Americans will die as the result of lung cancer due to cigarette smoking, and twice that many

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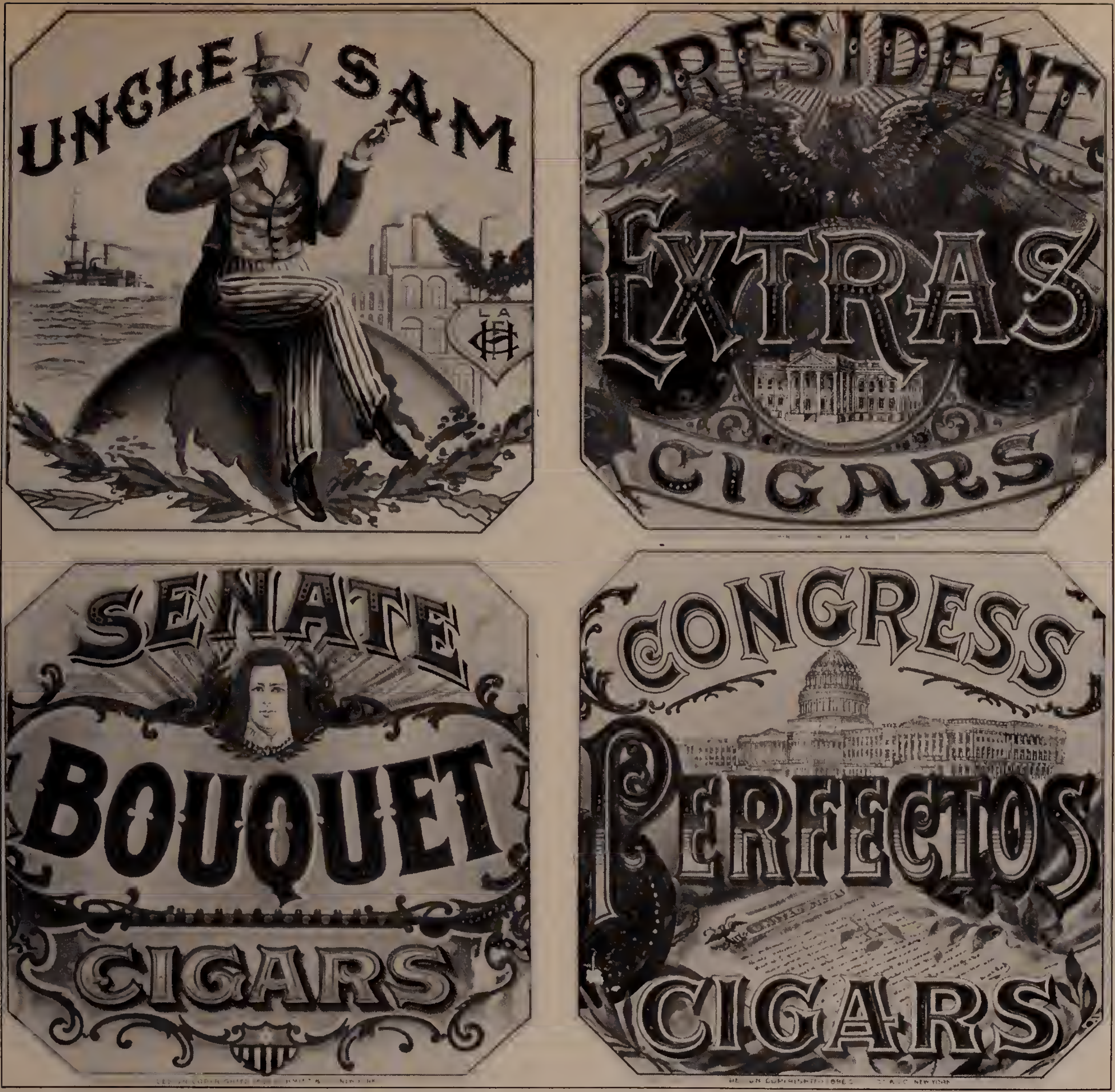

Patriotic American cigar brands: testimony to the smoke-filled room?

will die due to other cigarette-related diseases; but there remains no noticeable governmental effort to discourage the consumption of cigarettes.

In contrast, the government has declared AIDS as health priority number one and has pulled out all the stops—from hotlines to crash research programs to crack epidemiologic team investigations. The Assistant Secretary of HHS has noted that there have been approximately 2,000 cases of AIDS and that the two-year mortality rate for AIDS is approximately 80%. This is the same mortality seen in lung cancer.

Fifty years ago a United States Senator and a President's daughter endorsed Lucky Strikes. Although such images would seem ridiculous today, the tobacco industry's love affair with government is still as torrid as ever.

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The research smokescreen

Moving from academic debate to action on smoking

MICHEL COLEMAN, BM, BCh

Smoking is a major health hazard for individuals, and a massive drain on the health resources of nations; but smokers accept the risk, and governments accept the cost.

Behind this apparent paradox lie the tobacco companies, exploiting every available means of persuading people to smoke. Tax revenue from tobacco sales then becomes the incentive for government to tolerate their activities. Until these activities are brought under control, smoking will remain the greatest single cause of premature death and preventable illness in developed countries. Still worse, it will become a new and major cause of equally avoidable illness and death in developing countries, in which the industry is now promoting tobacco products with appeals to sexual and commercial success, and without health warnings. Cigarette consumption is rising rapidly as a result. Before the health risks of tobacco can be overcome, physicians and public health specialists will need more effective weapons; academic research, health education, and advice to government have clearly been inadequate for the job. It may be instructive to consider why this is so.

The success story of medical research over the last 30 years has been the production of unassailable evidence that cigarette smoking is the cause of the 20th-century epidemic of lung cancer, and a major etiologic factor in ischemic heart disease and peripheral vascular disease, in chronic obstructive lung disease, in cancers of oropharynx, esophagus, and bladder, and in low-birth-weight deliveries. But this success has not been translated into the great improvements in public health which might have been expected.

In the United Kingdom, for example, the proportion of adult males who smoke has fallen from 62% to 42% since 1960, and for adult females from 44% to 32% since 1966.[1,2] These encouraging trends are at least partly due to vigorous health education campaigns, using evidence supplied by medical research. But smoking is now responsible not only for one in seven deaths—over 90,000 premature deaths from heart and lung disease each year in the UK—but also for an enormous toll of morbidity and lost economic activity. Although fewer children now take up smoking than previously, one in three girls and almost as many boys become regular smokers by 19 years of age—not far short of the adult proportion.[3]

Physicians can and do influence the smoking behavior of their patients. But what about sources of advice to dissuade the young never-smoker from starting? In the United Kingdom, research charities founded to combat cancer and heart disease spent £14 million on research in 1978, but less than 2% of this on health education.[4] So far, there is little evidence of a change in approach.[5,6] The health education bodies funded by government could only spend £2.1 million to run their spirited antismoking campaigns in 1981.[7] By contrast, the UK tobacco industry spends £100 million a year on advertising,[8] much of it aimed at youth. Such an imbalance cannot be said to permit a truly free choice on whether to smoke, yet it is clear that long-term prospects for improvement in public health depend on never-smokers never becoming smokers.

Medical advice to government could not be more blunt than that given by the Royal College of Physicians in 1971: "Action to protect the public against the damage done to so many of them by cigarette smoking would have more effect upon the public health in this country than anything else that can now be done in the whole field of preventive medicine." [9] Five years later, in a statement on prevention and health, the Department of Health said: "No one can seriously doubt any longer that the habit of cigarette smoking has been responsible for an enormous amount of preventable disease and untimely death in this country".[10] Good medical advice, unreservedly accepted by government. Seven years later, the government still has no overall strategy to deal with the damage done by smoking to the health of its electorate, and its legislative and political efforts have been uncoordinated and ineffective. Tobacco advertising was banned from television in 1965 and from radio in 1973. Health warnings appeared on packs in 1972.[1] But no fewer than 16 parliamentary bills to provide more effective control of advertising have been defeated by political opponents with financial interests in the tobacco industry, although government support would have ensured the passage of any one of them into law. Since 1975, further controls on advertising have been achieved through a series of "voluntary agreements" between the tobacco industry and government. But the law of 1933 prohibiting tobacco sales to children under 16 is almost never enforced and is openly ignored. Cigarettes are now 15% cheaper in real terms than in 1960. The tobacco companies simply flout the television ban by sponsoring televised sport, obtaining prolonged exposure of their name and logo far more cheaply than if they paid for advertising directly. They have diversified into sponsoring adventure holidays and books on sport—all aimed at young people. As one executive admitted, such promotions are "an extension of the marketing arm for cigarettes." [15] *The Lancet* summed it up well: "Voluntary agreements do not stop epidemics." [5] As the British experience clearly shows, neither do they stop advertising.

The culmination of this series of "voluntary agreements" came in October 1982, when the tobacco industry endowed a Health Promotion Research Trust with £11 million to

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fund three years of research into the promotion of health. But studies "designed directly or indirectly to examine the use and effects of tobacco products" are specifically excluded.[12] The agreement was condemned by Sir George Godber, lately chief medical adviser to government, as "a sick joke at the public's expense." [13] The research limitation, however, was defended by Health Minister Kenneth Clarke on the grounds that it would not prevent the trust sponsoring research which threw further light on the damage to health caused by smoking.[12] This is broadly equivalent to the government welcoming Mafia investment into research on the promotion of law and order, providing organized crime rackets are excluded from study. Seen in this light, the UK government's claim to have a public health policy based on prevention is like the emperor's new clothes—barely credible.

In short, successful medical research, vigorous (if ill-funded) health education, and strong advice to government have all failed to prevent the health hazards of smoking. Governments have simply failed to respond, largely because their national economies are deeply penetrated by tobacco. The Food and Agriculture Organisation, in its report on the economic significance of tobacco, baldly states: "Until world demand, which was still rising in 1977–80, can be curbed sufficiently to make tobacco growing less profitable, it will be difficult to induce growers to curb production." [14] Demand, however, is stimulated and maintained by advertising: fewer than 20 nations, 12 of them European, have actually banned tobacco advertising.[15] In the United States, 13% of excise tax receipts (1% of all taxes) are derived from tobacco—$6.8 billion in 1981.[14] In the countries of the European Economic Community, 2% to 8% of all tax revenue derives from tobacco.[14] In such circumstances, it is not surprising that attempts to mobilize a government to control tobacco will always meet powerful opposition. In the 120 countries producing tobacco around the world, the scale of the problem may vary, but its nature is the same.

The British and American governments, in common with many others, now display a corporate addiction to tax revenue from tobacco. All the signs of addiction are there. They regret the damage it causes to health, and they say they honestly want to give it up; but they have an irresistible craving for more, and they collude with their suppliers to protect the supply from law.

Civilized government has a clear duty to protect the health of its people. The legislative means by which this may be achieved for the health hazards of smoking have been discussed in a thorough review by Roemer.[15] A copy should be sent to every legislator in the land, with instructions to read it, and to act on it. The Scottish Health Education Committee has produced a concise and exemplary guide[8] to the fiscal, legislative, and other measures which can be taken by a government "to convince the public that smoking really is a major threat to health and one which the government takes seriously."

There is an urgent need to create such a powerful expression of public desire to be rid of this dangerous poison, that governments rediscover the political will to confront the tobacco industry, since "these industries can diversify into other products; dead men and women cannot." [8]

Physicians have a duty to throw their weight into the argument,[16] even if it means ditching the usual caveat that academic integrity demands political neutrality. To be silent during a public health tragedy is not honest medicine, and this is no longer simply an academic debate. William Osler and John Simon fought tuberculosis and cholera in the corridors of power, not just at the bedside and in the laboratory. Today, if we fail to make use of our influence, as physicians, to arouse public opinion on this most grave of public health issues, then we forfeit any claim to be concerned about the prevention of ill health as well as the cure of disease.

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OCCUPATIONAL HEALTH SHOULD NOT ACCEPT TOBACCO INDUSTRY SPONSORSHIP

Tobacco industry sponsorship of sport, opera, and the visual arts is objectionable enough, but when it comes to the industry providing money for the Institute of Occupational Health, things have gone too far. Yet the *Financial Times* of June (1981) carried a half-page advertisement appealing for £2½ million for the institute, and listed among the companies that have contributed already was Imperial Tobacco. Included in the advertisement ironically is a chest radiograph showing advanced silicosis: the radiograph could equally well have shown a carcinoma caused by cigarette smoking . . .

The Institute of Occupational Health is still at an early stage in its development. Its aims deserve generous support from individuals and corporate bodies, but the enthusiasm of the fund raisers should be tempered by discretion. The *BMJ* believes that no medical body should accept money from the tobacco industry, and that the Institute of Occupational Health should recognise its mistake and sever the connection.

—Editorial
Br Med J 1981; 283:4.

Culpable negligence: a case for the courts?

MAURICE H. LESSOF, MD

The fall in cigarette smoking is gathering pace—enough to make the tobacco companies diversify their financial investment but as yet insufficient to affect the deaths caused by smoking. Between 1960 and 1980, the annual consumption of tobacco by adults in the United Kingdom declined by 16%, followed by a further 9% fall in cigarettes sold in 1981 and a 7.5% fall in 1982.[1]

The scale of the death and destruction caused by the tobacco industry remains astronomical. Fifty thousand premature deaths from cancer, heart disease, chronic bronchitis, or obstructive airways disease in Britain alone, 50 million lost working days a year, nearly 2,000 people seriously burned or killed in fires started by cigarettes.[2] Increasing quantities of cigarettes are now exported to the Third World—an idea that is as deplorable as the sale of opium in the 19th century.

The steps taken by governments have been feeble, and politicians who speak against the tobacco industry have tended to disappear without trace. Mr Laurie Pavitt placed a bill before the British parliament in 1982 which would have outlawed the promotion of tobacco. It ran out of time, because the previous item of business had suddenly been delayed by 164 last-minute amendments.

When Norway banned tobacco advertising, the previously steady rise in cigarette smoking was reversed and there was a 5% reduction in the number of smokers over a two-year period.[2] Even more encouraging, in young men in the age group 16 to 24, there was a fall from 49% of smokers in 1974 to about 33% eight years later. In another survey[3] it has been suggested that only a small number (7%) in this age group consider that they will become permanent smokers. However, a more detached follow-up study[4] puts the chance at 85% that early smoking will become a habit. The struggle for the minds of the young is at the heart of the matter. Although smoking is a potent cause of respiratory symptoms, even in childhood,[5] addiction to nicotine is hard to cure.

The belief that smoking is fun, that it makes people confident, or that it makes them look tough may be losing sway. A survey of nearly 16,000 children in 65 schools and colleges reflects the results of health education policies and the influence of key role-models.[3] Among those children who thought their parents, teachers, or friends would object very few smoked, as opposed to nearly half who thought their parents would not mind. In Britain there is also a wider change in attitudes. As smoking has slowly moved towards becoming socially unacceptable, the Trades Union Congress decided, in 1981, to support antismoking campaigns and the rights of nonsmokers. There has also been an increased demand for nonsmoking areas in public places.

Not surprisingly, the tobacco lobby has fought back. After a ban on television advertising came the gift-coupon schemes and the claim that advertising bans would cause unemployment and close down newspapers (contrary to the experience in Norway[2]). After this came health promotion schemes—paid for by the cigarette companies on condition that they must avoid the investigation of tobacco.[6] There has also been the sponsorship of sport and the arts, aiming both at acquiring prestige and at developing the idea of financial dependence on tobacco interests.[7] Television coverage of tobacco-sponsored events has also served to keep cigarette advertising in the public eye and may explain the triumphant claim that in Finland, Poland, and Italy a "ban" on advertising had absolutely no effect. Why ban advertising, said the tobacco lobby, when it is so lucrative a source of revenue for the mass media and does not have any influence anyway?[8]

One particular promotion method now rivals all the rest—an investment in the holiday business. Silk Cut Masterclass Holidays (Gallaher), Marlboro Adventure Holidays (Philip Morris), and Peter Stuyvesant Travel (Rothmans International) seek, once again, to link the names of tobacco products with glamorous activities.[9] To the extent that the tobacco companies are diversifying their investments, this should perhaps be welcomed, but as a way of advertising brand names "through the back door" this practice is open to question.

To many, the concept of a business which promotes cancer and death is obscene, and the growing unpopularity of the tobacco barons is being translated into political pressure. Physicians, informed as they are about the dangers of cigarettes, smoke less than any other group. With evidence such as this, many more physicians are joining the antitobacco lobby and are now attempting to exert a political influence. Action is still needed from government on two fronts—a ban on all promotion or advertising and a realistic increase in tobacco taxes. Viewed as a health tax on tobacco, the income could be used to provide extra government money for the hospital service, the Health Education Councils, and the sponsors of sport. This would go some small way towards providing compensation for the harm that tobacco undoubtedly does.

There are other ways in which physicians can help. Giving health information to the newspapers has been a disappointing endeavor because the facts so often have been suppressed. But if physicians can use their influence to achieve a ban on advertising and promotion, it should follow that investigative reporters will be allowed or even encouraged to speak up—in particular, about the continued recruitment of new, young smokers who will become the cancer victims of the future. If this fails, the time has come to marshall the evidence that will allow tobacco companies

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to be sued in the courts for the years of willful neglect when, knowingly, they continued to cause deaths before they even agreed to introduce a warning on the label.

The evidence is now strong enough to convince any impartial judge or jury of the complicity of cigarette manufacturers in causing death and disability; but it will need the help of the medical profession to see the argument through. It will also need the organizational and financial help of an antismoking group that is willing to support an individual claimant in a lengthy legal battle with a giant industry.

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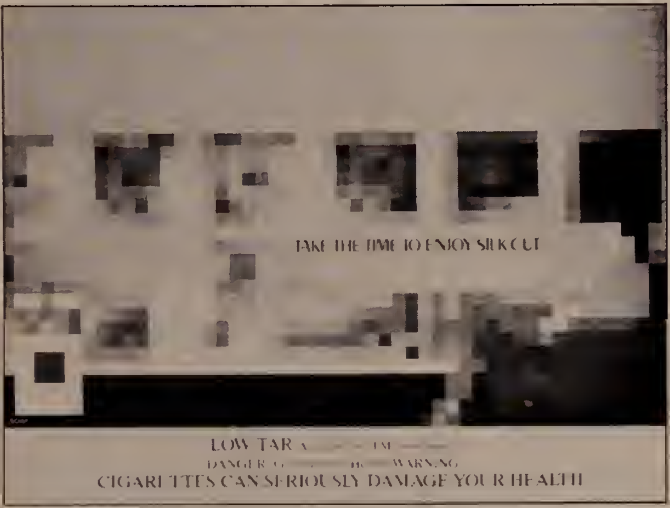

TAKE THE TIME TO ENJOY SILK CUT
LOW TAR
DANGER
WARNING
CIGARETTES CAN SERIOUSLY DAMAGE YOUR HEALTH

In Great Britain tobacco companies are undaunted in the face of partial advertising bans, mandated enlargement of the warnings, and prohibitions against the depiction of people smoking. The companies' psychologists appear to have learned that associating brand names with mysterious images, striking colors, and fast-action sporting events can keep cigarette sales high. Many brands also continue to feature the Royal crest and the words "by appointment to Her Majesty the Queen." Noted *The Lancet* in 1978 (ii:880): "Some cynics refer to the warrant as the Royal Health Warning, the last four monarchs having died of diseases related to smoking."

ETHICS

Cigarette advertising and *The New York Times:* An ethical issue that's unfit to print?

GEORGE GITLITZ, MD

Since 1975, George Gitlitz, MD, *a vascular surgeon and past president of the Broome County (NY) Medical Society, has written letters to the editor and publisher of* The New York Times *challenging them to discuss on the editorial page their reasons for continuing to accept advertising for cigarettes. Following is the correspondence.*

January 4, 1975

The Editor
The New York Times
New York City

To the Editor:

Your outspoken editorial deploring the rise in cigarette smoking, especially among teen-age girls, and placing much of the blame on advertising, would be commendable were it not for the fact that the *New York Times* is one of the worst offenders in this respect.

Anyone who understands *The Times'* long tradition of independence of Editorial and Advertising from each other, and who understands the necessity for such a policy if there is to be a free press, can accept (though occasionally with revulsion) the publication of advertisements for even the most repugnant of political philosophies.

But does the printing of an advertisement for a commercial product known to be harmful to health fall into the same category? If someone wished to run an advertisement for candy bars containing cyanide capsules, would *The Times* accept it? In the name of Freedom of the Press?

I suggest that a review of your commercial advertising policy is in order.

Sincerely,
George F. Gitlitz, MD

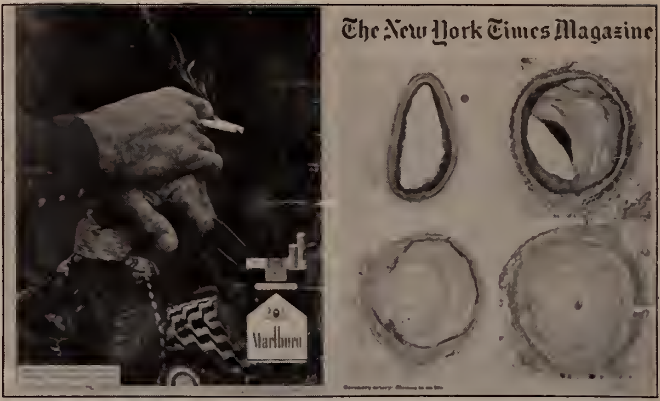
January 20, 1975

Dear Doctor Gitlitz:

Since your letter of January 2 pertained to advertising, it was referred to the Advertising Acceptability Department.

The Times *has published many news articles reporting developments in research and the opinions of experts who have held that cigarette smoking is harmful. Also in our editorial columns we have repeatedly set forth our position on the hazards to health involved in cigarette smoking.*

In August, 1969, this newspaper established minimum standards for the acceptance of cigarette advertising. In November, 1970, the cigarette package label itself was changed to read: "Warning: The Surgeon-General has determined that cigarette smoking is dangerous to your health" and our requirements were modified accordingly. In March, 1972, the Federal Trade Commission established regulations whereby all print advertisements for cigarettes must contain health warning statements set forth in a clear and conspicuous manner. Since then, all advertisements for cigarettes published in The Times *have complied with these requirements.*



A story on coronary heart disease on the front cover, a pack of coronary risk factors on the back cover.

As you can see, we have made an earnest effort to protect our readers. However, until Congress decides, if ever, that a total ban is both necessary and enforceable, adults who have been thoroughly informed on the dangers of cigarette smoking will have to decide for themselves whether they want to accept the risks involved.

*Thank you for writing and for your interest in this newspaper.**

Sincerely,
Robert P. Smith
Manager
Advertising Acceptability

January 24, 1975

The New York Times
229 West 43rd Street
New York, N.Y. 10036

To the Editor: (Not For Publication)

I respectfully but strongly object to the manner in which you handled my letter commenting on your editorial on smoking.

Obviously, I do not expect every letter I write to *The Times* to

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Address correspondence to Dr Gitlitz, 33 Mitchell Avenue, Binghamton, NY 13903.

* A decade ago (March 19, 1973), the present editor of the *Journal* received an identical letter in reply to criticism of *The Times'* acceptance of cigarette advertising.

be published, especially if the literary quality does not merit publication.

But I do feel that the thoughts expressed therein are appropriate to your Letters-to-the-Editor section (whether in my words or someone else's), and should not be hidden from the eyes of your readers behind the smoke screen of the very polite but all too private Public-Relations-type reply.

Certainly, your advertising policy is your own business. But you allow your readers to throw brickbats at *The Times* on other matters, and I am confident *The Times* could survive a public discussion of this matter on your Editorial page.

I take the trouble of writing this because of similar experiences I have had in the past. I have had a number of letters-to-the-editor on the subject of smoking accepted by various papers (including *The Times* 8/11/69, and *Times Magazine* 2/24/74). But whenever the subject of a letter has been a criticism of that publication's acceptance of cigarette advertising, the letter is never published, but a personal reply from an ad man is always forthcoming.

The arguments which Mr. Smith uses are the party line of the Tobacco Institute. Indeed, the part about informed adults deciding for themselves whether or not to smoke is lifted almost verbatim from those horrible ads for Vantage cigarettes! Such reasoning is specious, and you know as well as I do that such reasoning, combined with the slick multi-colored ads in the Magazine, is likely to tip your 13-year-old daughter into becoming a smoker.

And thus I feel that, despite your occasional commendable editorial comments on the subject of smoking, *The Times* does a terrible disservice to a gullible public by advertising cigarettes.

It would be most interesting if you were to publish Mr. Smith's letter, or the gist of it, as an editorial, and see what your readers had to say about it.

Sincerely,
George F. Gitlitz, MD

No reply.

* * *

May 12, 1975

Letters to the Editor
The New York Times
New York City

To the Editor:

I would like to raise strong objections to misleading assertions which are made in current advertisements for "Saratoga 120's" cigarettes, ads which are carried in the *N.Y. Times.*

The ads state that the cigarettes are "longer (120 mm. vs. 100 mm.) and slimmer than 100's, so you enjoy extra smoking time . . . without smoking more cigarettes." And that one can smoke "longer without smoking more."

Leaving aside the faulty geometry of the suggestion that a cigarette will last longer because it is "slimmer," let's assume that the more significant alteration is indeed the increase in length, and thus that their main contention, that there are "more puffs than 100's," is essentially correct.

It is the implication that one can smoke "more puffs . . . without smoking more cigarettes," and therefore "without smoking more," that is misleading and pernicious.

The statistics which comprise publications such as the Surgeon General's reports were gathered during the decades when a "cigarette" was a "cigarette," and when "number of cigarettes per day" was a reasonably stable yardstick by which to measure the relative risk to which smokers were exposed.

But now that manufacturers have begun to play games with the cigarette's dimensions, risk can only be related to "puffs per day" (silly though it may sound) or, less reliably (because of the "slimness" factor), to "mm. per day."

For the smoker, the whole thing is Russian Roulette, and obviously the safest course is not to smoke. But failing this, the smoker should be aware that, other things being equal—or being unproven (such as tar, nicotine, filters, etc.)—more puffs mean more trouble.

And advertisements which assert anything to the contrary, even to a readership who should know better, are objectionable.

Sincerely,
George F. Gitlitz, MD

No reply.

* * *

December 10, 1975

To the Editor
The New Times
New York City

To the Editor:

You have previously informed me, in great detail, of *The Times'* policy regarding cigarette advertising.

I would again respectfully urge you to make this policy public, on your Editorial Page, and invite comments on it from your readers.

If our freedoms, including Freedom of the Press, are worth anything, they should be subject to the light of healthy debate.

Your particular contention—that you continue to advertise cigarettes because as yet there is no law against it—is only a single viewpoint. Many of us feel that cigarette advertising, from a public health standpoint, is no less pernicious an activity than incitement-to-riot; and that the only difference is that the Law has not yet caught up with Twentieth Century Medicine!

In any case, I'd be interested in comments from readers of *The Times.*

Sincerely,
George F. Gitlitz, MD

December 22, 1975

Dear Dr. Gitlitz:

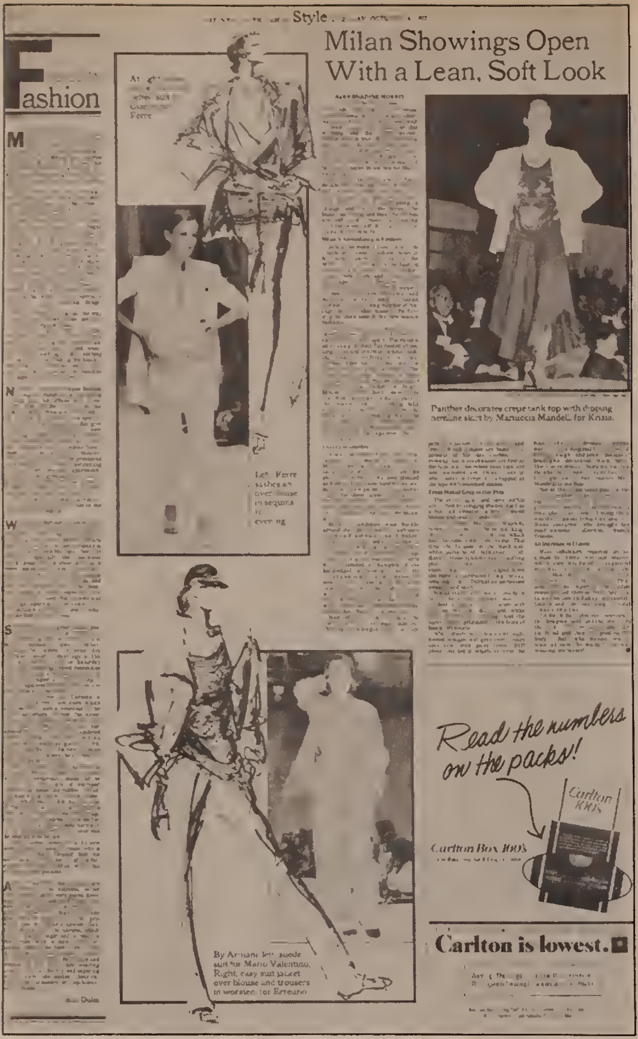
Your recent letter to the Editor on the apparent contradiction between our editorial position on cigarette smoking and our advertising stance has been referred to me.

The point that you make is one that has been frequently discussed at The Times. *You may recall that in mid-1969,* The Times *established its own standards for acceptance of cigarette advertising. We required a warning with respect to the risks of smoking cigarettes, and in addition, a disclosure of the tar and nicotine content. As a result of the adoption of these standards, the cigarette companies withdrew their advertising from* The Times. *Obviously, this action on our part, resulted in a reduction in advertising revenue. During this period, editorials and news stories frequently pointed out the hazards of cigarette smoking.*

In 1971, Congress banned cigarette advertising on T.V., and in 1972, the Federal Trade Commission imposed requirements on cigarette advertising in media similar to the ones that we had established in 1969.

Since 1972, some of the cigarette companies—confronted with the universal application of the above mentioned print advertising requirements and the T.V. ban—resumed advertising in The Times.

In summary, the question we face is whether against the background I have described, we should bar cigarette advertis-



Style

Fashion

Milan Showings Open With a Lean, Soft Look

Read the numbers on the packs!

Carlton is lowest.

The fashion-conscious, health-conscious woman looks to *The Times* for guidance.

ing when cigarettes are not illegal; when the advertising meets legal requirements and includes a specific warning; and when, we must presume, our readers are fully aware of the risks of smoking cigarettes.

Our conclusion has been, and still is, that our readers should make that decision for themselves. We have considerable difficulty embracing the idea that the way to curb harmful or potentially harmful products is by banning advertising for them.

This is a very difficult and somewhat controversial subject, and we very much appreciate your own view of the matter.

Sincerely,
John J. McCabe
Assistant to the Publisher

December 24, 1975

John J. McCabe
Senior Vice President
The New York Times
New York City

Dear Mr. McCabe:

I greatly appreciate your taking the trouble to write me regarding *The Times'* position on cigarette advertising.

Without belaboring the point, however, I would be much happier if *The Times* were to state this policy publicly, editorially—and thereby evoke comments on it from your readers.

Because *The Times* does consistently discuss the great moral issues of the day, it's difficult for me to accept your reticence about airing this particular one. Indeed, you have yourself given the best possible reason for doing so: because "This is a very difficult and somewhat controversial subject." If *The Times* can't deal forthrightly with such material—who can?

Having made a similar suggestion in the past, and having received a similar response, I have the uncomfortable feeling of facing a paper curtain—a polite but impenetrable "omerta." It's one thing to have a Letter-to-the-Editor rejected—but quite another to receive a lengthy personal reply from a Senior Vice President of the newspaper. Perhaps I should be flattered, but I can't help thinking that this relieves you of the less attractive task of defending your stance before your whole readership.

And finally, quite honestly, much as I respect *The Times*, it's hard to believe that your reluctance to open the matter publicly isn't influenced to some degree by economic considerations. "Say it ain't so, *Times*!"

Seriously, I think such a debate would be in the public interest, and that there's a responsibility here that *The Times* ought to meet.

Thank you for your attention,

George F. Gitlitz, MD

No reply.

* * *

June 9, 1976

Letters to the Editor
The New York Times
New York City

To the Editor:

The hypocrisy of *The New York Times* is astounding.

You run a self-righteous editorial criticizing the Reserve Mining Company for dumping cancer-producing asbestos wastes into Lake Superior. "Should people in the area develop cancer fifteen years from now," the editorial says, "they will (not) forgive the unconscionable reluctance of the Reserve Mining Company to allow considerations of public safety to cut into its profits."

And in the same issue of the newspaper you run advertisements for cigarettes. And you keep the money.

Sincerely,
George F. Gitlitz, MD

No reply.

* * *

October 13, 1976

Fred M. Hechinger, Assistant Editor
Editorial Page, *The New York Times*
New York City

Dear Dr. Hechinger:

Though I've had letters-to-the-editor on the subject of smoking and health printed in *The Times* (8/11/69) and *The Times Magazine* (2/24/74), I've been totally unsuccessful with a number of letters I've submitted on the subject of the *Times'* own policy of advertising cigarettes.

The letters are not merely rejected. Rather, I've received long personal replies, wih extended explanations of your policy, from your "Manager of Advertising Acceptability," Mr. Smith (1/20/75), and from none less than Mr. McCabe, the Senior Vice President (12/22/75).

Really, I have little interest in such privately expressed apologias, but prefer, instead, to have the issue brought to the attention of your readers.

Please, then, be so kind as to give me honest answers to two simple questions:

1. Is there any chance of having a letter on this topic printed in *The Times?* Or, if the stumbling block is merely some deficiency in my personal literary style:

2. Is there any chance of *The Times'* setting forth and justifying its cigarette advertising policy in an editorial of its own? And lest there be any misunderstanding: not an editorial on cigarettes, but on cigarette *advertising*, *your* cigarette advertising.

I know that you have many important things to write editorials about, like Lassa fever, and I certainly wouldn't want you to choke your Editorial Page in trivia, especially after your stout denunciation of it in the presidential campaign. But the 1975 edition of the Surgeon General's Report does say that "cigarette smoking remains the largest single unnecessary and preventable cause of illness and early death."

I'm enclosing a copy of yet another letter-to-the-editor, but I confess that I have little serious hope of penetrating your paper curtain. Green paper, that is.

Sincerely,
George F. Gitlitz, MD

October 13, 1976

Letters to the Editor
The New York Times
New York City

To the Editor:

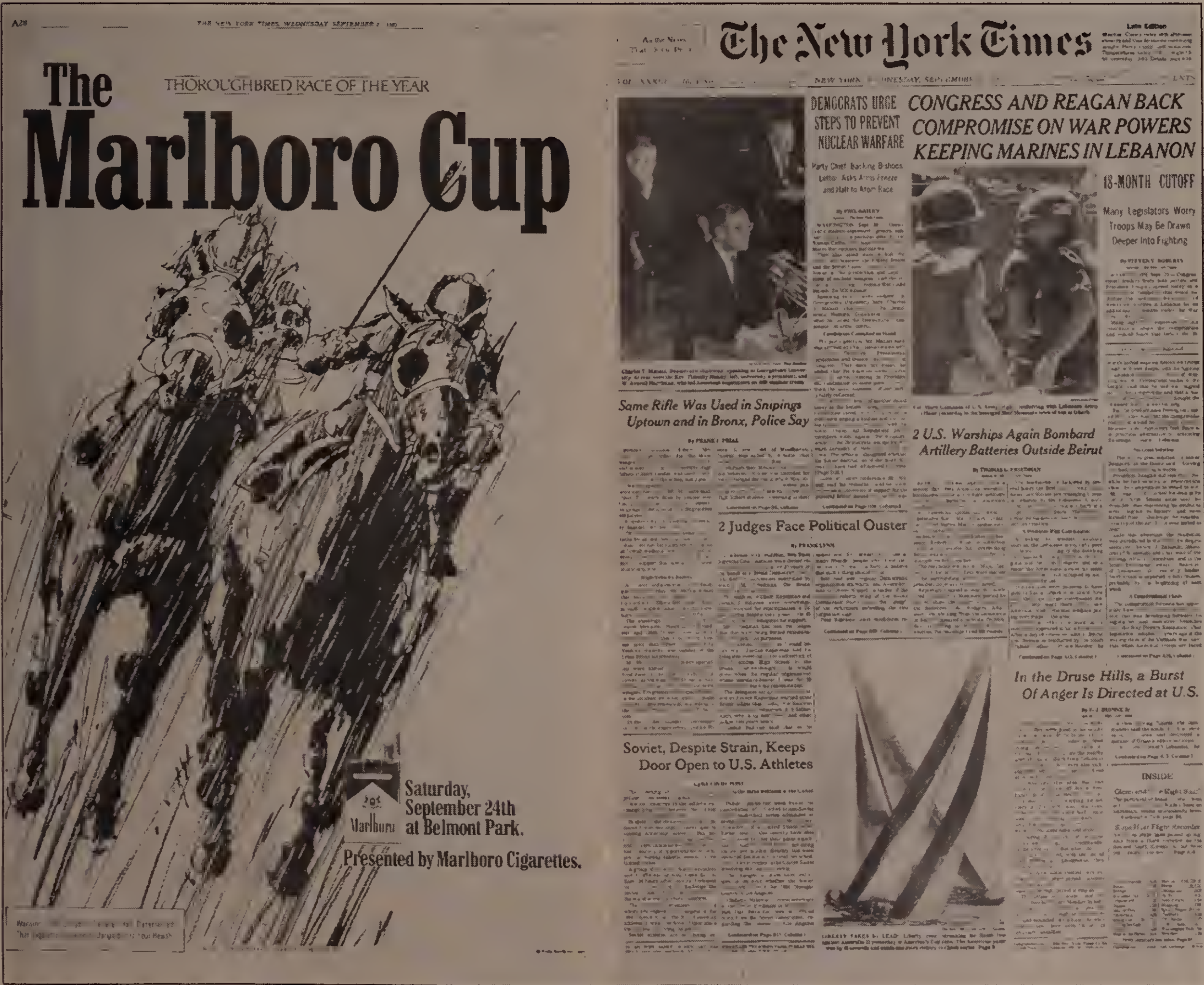
Re: Editorial, October 12 (on Lassa fever and Legionnaire's disease)

The Times' concern over the "mysterious diseases" certainly is touching. These scares will be useful, says *The Times*, "if they discourage complacency and induce stepped-up medical research into their mysteries."

Bravo, *Times*! Always keeping us on the alert; urging research into "diseases medical science does not know"; diseases which have "taken as many as 230 lives in Zaire and Uganda." Or about two dozen in Philadelphia. Or one at Fort Dix.

Meanwhile, *The Times* advertises cigarettes, perfectly well known to be virtually the only cause for 75,000 deaths per year from lung cancer (in this country alone!), and known to be one of the three main factors, if not *the* main factor, in 600,000 deaths per year from heart attacks.

And *The Times* muses, wistfully, that there are "diseases medical science . . . knows but cannot do much if anything



A28 THE NEW YORK TIMES, WEDNESDAY, SEPTEMBER

The THOROUGHBRED RACE OF THE YEAR

The Marlboro Cup

Saturday, September 24th at Belmont Park.

Presented by Marlboro Cigarettes.

The New York Times

NEW YORK

DEMOCRATS URGE STEPS TO PREVENT NUCLEAR WARFARE

Party Chief Backing Bishops Letter Asks Arms Freeze and Halt to Atom Race

CONGRESS AND REAGAN BACK COMPROMISE ON WAR POWERS KEEPING MARINES IN LEBANON

18-MONTH CUTOFF

Many Legislators Worry Troops May Be Drawn Deeper Into Fighting

Same Rifle Was Used in Snipings Uptown and in Bronx, Police Say

2 U.S. Warships Again Bombard Artillery Batteries Outside Beirut

2 Judges Face Political Ouster

Soviet, Despite Strain, Keeps Door Open to U.S. Athletes

In the Druse Hills, a Burst Of Anger Is Directed at U.S.

INSIDE

Headlines on the back page sometimes seem more important than those on page 1. *Times* sports writers or TV critics seldom question the sponsorship of televised sports events by cigarette companies.

about."

Of course we can't! And you're one of the reasons!

George F. Gitlitz, MD

No reply.

* * *

An article on cigarette advertising was sent to Arthur Ochs Sulzberger, President and Publisher of *The Times.*

May 2, 1977

Dear Dr. Gitlitz:

Thank you for your letter of April 23 and its enclosures.

We are, as of this moment, rethinking many of our advertising acceptability standards, so your letter is, indeed, most timely.

Sincerely,
Arthur Ochs Sulzberger

* * *

August 1, 1977

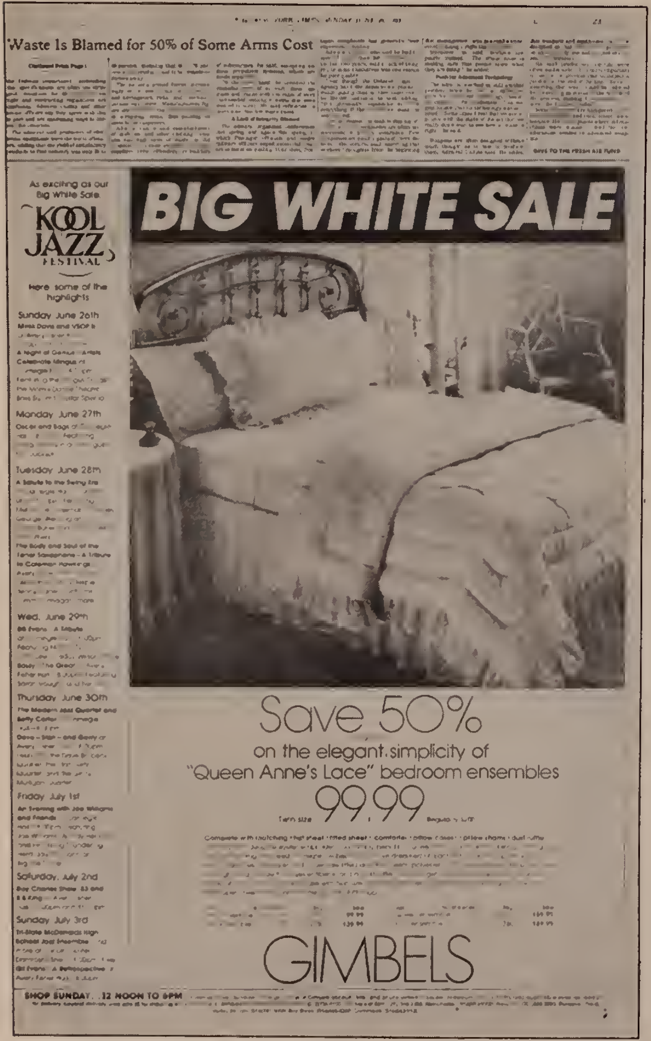
Arthur Ochs Sulzberger
President and Publisher
The New York Times
New York City

Dear Mr. Sulzberger:

It was with great disappointment that I learned that a change in the *Times'* policy of advertising cigarettes—at which you had hinted in your letter to me of May 2—was not to occur; and that the *Times'* "rethinking" of its standards for advertising acceptability had brought forth only a curtailment in the advertising of pornographic movies.

My understanding of the *Times'* policy, if I read correctly the news story and the editorial in the June 21 edition, is that the issue turns not on any question of potential harm to the consumer of a product (assuming that commerce in the product is legal), but solely on the taste or propriety of the ad itself.

Thus *The Times* sharply limits advertisements for pornography, a product whose harmfulness is at worst a matter of controversy; and carries ads by the page-ful for a product undisputed as being the number one threat to health in the country. Because,



Waste Is Blamed for 50% of Some Arms Cost

As exciting as our Big White Sale.

KOOL JAZZ FESTIVAL

Here some of the highlights

Sunday June 26th

Monday June 27th

Tuesday June 28th

Wed. June 29th

Thursday June 30th

Friday July 1st

Saturday, July 2nd

Sunday July 3rd

BIG WHITE SALE

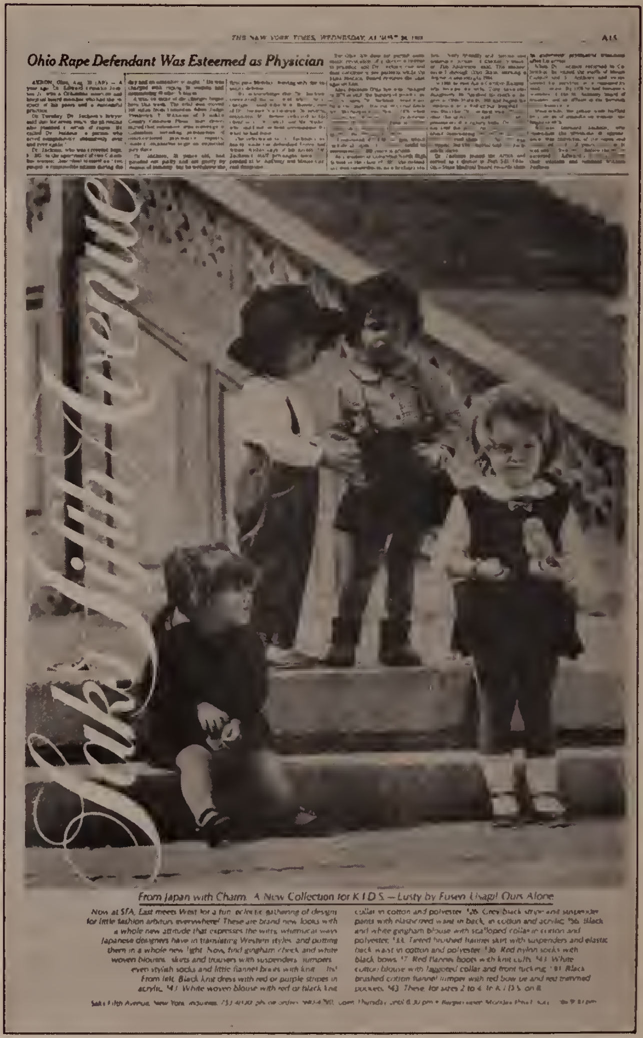
Save 50%

on the elegant simplicity of "Queen Anne's Lace" bedroom ensembles

99.99

GIMBELS

SHOP SUNDAY, 12 NOON TO 6PM



Ohio Rape Defendant Was Esteemed as Physician

From Japan with Charm. A New Collection for K I D S — Lusty by Fusen Usagi! Ours Alone

A department store white sale advertisement also promotes a cigarette-sponsored jazz festival (L). Gimbels, Kool cigarettes, and Saks Fifth Avenue are all owned by BATUS (British American Tobacco). In 1982 approximately $25 million in cigarette advertising was invested in the three New York City daily newspapers, and more than six times that amount was placed by department stores.

says *The Times*, the ads for the former are a "blight in print."

It would be superfluous to suggest to you that those of us who amputate legs which have become gangrenous from smoking, or who daily see smokers dead in their 40's from heart attacks and cancer—might regard cigarette advertisements as a "blight in print." Each of us has his own personal threshold for what turns the stomach. For this surgeon, it's advertisements for cigarettes. *The Times* has its own reasons for deciding what's "fit to print," and I don't presume to debate them.

However *The Times* occasionally does remind us that it's not unaware that smoking is harmful. Unfortunately, at such moments the apparent obliviousness of the editorial staff to the facts of life on the business side of the paper can try the patience of a person who ordinarily regards the Editorial Page as a forum for serious ideas.

Consider the "topics" item on July 12: Terrible things, cigarettes, it tells us. New studies show that they're even worse than we thought they were . . . People, now even women, dying in droves . . . Terrible . . . Must save these victims . . . How . . . So *The Times* proposes a solution—a massive informational campaign!

"Surely it is time for a large-scale Federal campaign to impress the dismal data on the smoking public, particularly the young."

Mr. Sulzberger, where in the world has your editorial writer been? Does he think that this information is *not* already available to the public? Does he think that no effort has been made to disseminate it?

Over the years I, like countless other doctors, have knocked myself out lecturing to stop-smoking clinics for adults, working with smoking-prevention programs aimed at school children, writing articles and letters-to-editors, and pestering my own patients. Abundant literature is available from the Cancer Society, the Heart Association, the Lung Association, and many other organizations. There's a warning message on every cigarette package and in every ad. And let's not forget the not infrequent news items and editorials in *The Times* and other papers.

But all of this is a teaspoonful compared to the Niagara that pours out of the cigarette advertising agencies. In the same July 12 *Times* that carried those 4½ inches of one editorial column discussing the harmfulness of cigarettes, an ad for Merit cigarettes occupied two full pages, and one for Kent ⅚ of a full page. Similar amounts of space are so occupied day after day, and far be it for *me* to tell *you* what happens on Sunday.

For whatever it's worth, the principle of "equal time," whether in political campaigns or college debating, seems to many to have some validity. The principle holds that people's minds are influenced not just by the soundness of an argument, but by the amount of time or page-space devoted to presenting it. Obviously, modern advertising techniques are a logical extrapolation of this principle. Snow 'em and spare no expense.

Knowing this (or I assume that he knows it!) does your editorial writer seriously believe that any new "large-scale Federal campaign" is going to be able to compete with the cigarette advertisers? Who would pay for all that "equal" space in *The Times*—for the art work, the glossy photos, the models, the copy? Would the Federal Government pay for it? Private contributors? The health insurance industry? Or perhaps *The Times*—out of a sense of public duty?

And even if such a campaign *could* be mounted, what a wasteful confrontation there would be. And perhaps the end result would be even more confusion than exists now.

There must be a better way. If *The Times* really believes that an effect can ensue from the impressing of "data on the smoking public," then a much more logical first step would be to halt the flood of *negative* "data," data which misinforms and misleads, data which is not data at all, false data which leads people to harm themselves—cigarette advertising.

In the present political climate, I see little likelihood that the Federal Government will force such a step. If it's to be done at all, it would have to be started voluntarily by a few influential institutions of the stature of *The Times*, doing it alone, urging other publications to follow suit.

I feel strongly that *The Times* should cease the advertising of cigarettes.

But if *The Times* can't see its way clear to taking such a courageous step, at least spare those of us who respect the newspaper and its Editorial Page—and who already *are* trying to talk people out of killing themselves—the kind of silly and unhelpful suggestion which appeared in that July 12 editorial.

Sincerely,
George F. Gitlitz, MD

No reply.

* * *

January 13, 1978

The Editor
The New York Times
New York City

To the Editor:

Re: "In Defense of Smoking"
by Ross Milhiser, Jr., President,
Philip Morris, Inc.

Go ahead, everyone out there in Patient Country. You think the place to learn about smoking is from the president of Philip Morris?

You think cigarettes don't cause heart attacks, and lung cancer, and blocked arteries in the legs? Go ahead, then, smoke!

Just remember that we're waiting for you, with our scalpels.

George F. Gitlitz, MD

No reply

* * *

November 9, 1978

Letters to the Editor
The New York Times
New York City

To the Editor:

The observation by Michael T. Craig, of The Tobacco Institute, that marijuana use is high among youngsters despite the fact that it is not advertised—and the conclusion he then draws, modestly deprecating the importance of tobacco advertising—represent a facile and superficial comparison of two industries which do have some things in common, but differ in others.

But let's not labor too hard to dispel the illusion he harbors. Perhaps he'll see this as a reason for recommending to his constituents that they stop cigarette advertising. Think of the money they'd save!

George F. Gitlitz, MD

No reply.

* * *

John Oakes, Editorial Page Editor of *The Times*, addressed a breakfast meeting of about 300 members of the Harpur Forum of SUNY Binghamton on "Crises in today's world."

October 16, 1980

John B. Oakes
The New York Times
New York

Dear Mr. Oakes:

I regret that a last-minute emergency forced me to miss your address to the Harpur Forum this morning. Friends tell me that it was an excellent meeting.

I was particularly disappointed because I had intended, during the Question-and-Answer period, to raise the subject of a "crisis" which I presume was not covered in your talk: the health problem caused by cigarette smoking, and *The New York Times'* contribution to that problem because of its policy of advertising cigarettes.

To be sure, one person's definition of a "crisis" will differ from another's, but to put this one in perspective a reasonable estimate is that 12–14% of all deaths which occur in the U.S. can be blamed directly on cigarettes. These deaths are all, of course, unnecessarily premature. (The basic arithmetic is this: approximately 1.9 million deaths are recorded per year; approximately 150–200,000 of the 600,000 coronary heart disease deaths, and 75,000 of the 90–100,000 lung cancer deaths, are attributed by statisticians to smoking. Actually, 12–14% is probably conservative, in that it doesn't take into account cigarettes' contribution to deaths other than in those two major categories. But it's close enough.)

Physicians consider that that number of unnecessary deaths from a single source qualifies as a crisis. The Dept. of HHS considers it a crisis, and on a global scale the WHO considers it a crisis. All agree that it's the number one health problem in both developed and underdeveloped countries.

Physicians at present have little hope that *The Times* will do what it should do—stop advertising cigarettes—but those of us who otherwise admire *The Times* continue to hope that at least there might be a public explanation of the present policy.

I had intended to request, therefore (understanding that you are retired and are perhaps no longer in communication with those who set *Times* policy), that you carry back to *The Times* this challenge:

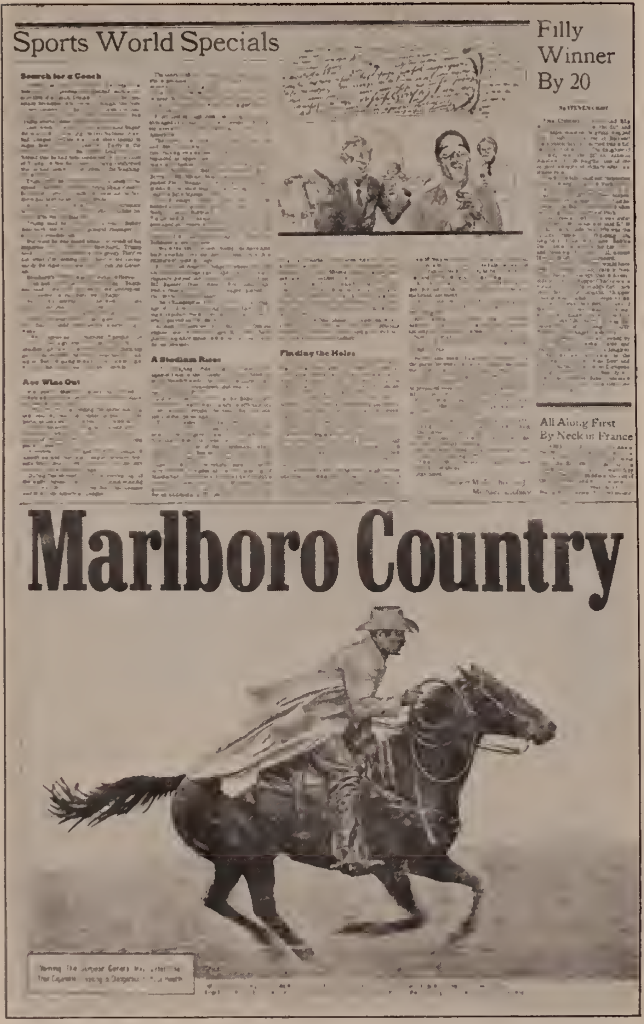
1. That *The Times* write and publish an editorial entitled "Why *The New York Times* Advertises Cigarettes," and after a suitable period publish a representative sampling of your readers' comments on the editorial; and

2. That *The Times* include in that editorial a succinct, but adequate and informative, "financial disclosure," so that its readers may know what part revenues from cigarette advertising play in the economic life of *The Times.*

Having previously put this idea in writing, but having been repeatedly put off by polite, personal communications from Mr. Smith, Mr. McCabe, and even Mr. Sulzberger himself; and believing that such private communications are not in the public interest, but rather, that *The Times* philosophy—on anything—belongs on its Editorial Page, I had hoped to voice this challenge directly to you, in public, aloud.

The circumstance which prevented my doing so was in itself ironic: As I was finishing my rounds and was about to leave for the meeting, I became involved in a lengthy, and ultimately unsuccessful, attempt to resuscitate a man who had suffered a massive coronary at about 7 AM. He was a smoker.

Sincerely,
George F. Gitlitz, MD

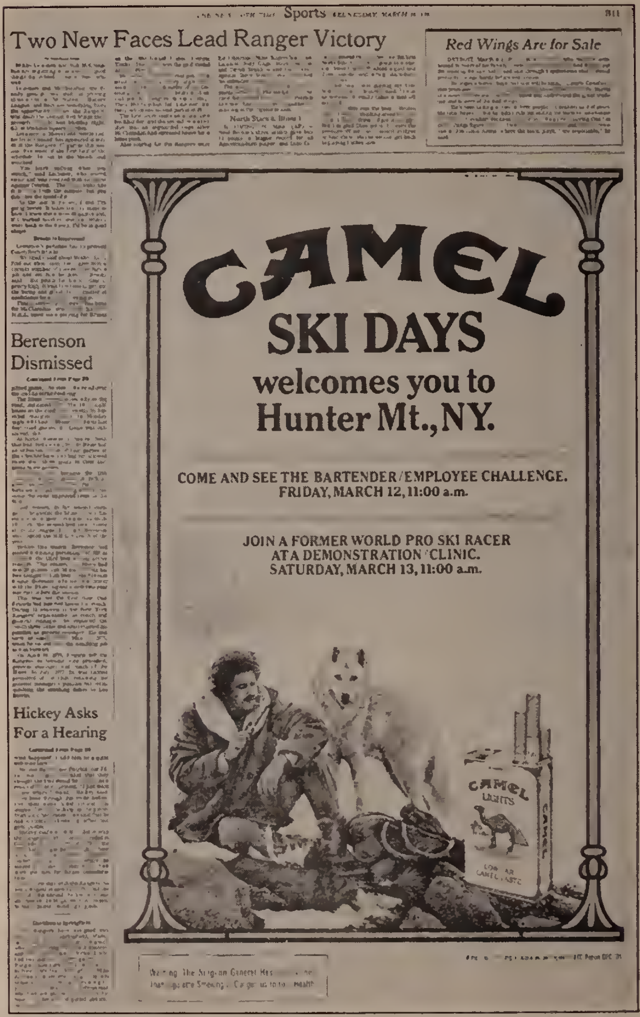


Sports World Specials

Filly Winner By 20

All Along First By Neck in France

Marlboro Country



Sports

Two New Faces Lead Ranger Victory

Red Wings Are for Sale

North Stars 8, Blues 1

Berenson Dismissed

Hickey Asks For a Hearing

CAMEL

SKI DAYS

welcomes you to Hunter Mt., NY.

COME AND SEE THE BARTENDER/EMPLOYEE CHALLENGE.
FRIDAY, MARCH 12, 11:00 a.m.

JOIN A FORMER WORLD PRO SKI RACER AT A DEMONSTRATION CLINIC.
SATURDAY, MARCH 13, 11:00 a.m.

CAMEL
LIGHTS

The sports editor of *The Times* has replied to one physician: "Please correct me, but it seems you are saying that we should not write about life on the cigarette sponsored tennis circuit while people die of cigarette caused diseases. Perhaps we should stop reporting anything until people stop dying." In Canada, where the Canadian Ski Association has accepted a multi-million-dollar sponsorship deal from the Canadian subsidiary of RJ Reynolds, the Canadian Cancer Society and the Canadian Council on Smoking & Health have denounced the arrangement: "Any fitness organization that is prepared to walk hand in hand with the tobacco industry in the 1980s has lost sight of its responsibility to all young Canadians and is out of touch with public opinion."

Acknowledgment of receipt of letter from Mr. Oakes' secretary; no reply.

* * *

September 1, 1981

John B. Oaks
The New York Times
New York, N.Y.

Dear Mr. Oakes:

I could not help being struck by your remark about the conflict between "health and profit" in yesterday's column.

You may recall my writing you on Oct. 16, 1980, suggesting that in pursuing its policy of advertising cigarettes, *The New York Times* makes precisely the choice—profit over health—which you (and I!) find so distasteful in the Reagan administration and the "predators" of the business community.

You are correct: "deaths from cancer and heart and lung disease will inevitably rise" as pollution increases. But right now, as I pointed out in my letter, deaths from those diseases are coming from cigarettes: approximately 274,000 deaths, or about 14 out of every 100 deaths in America each year, are directly attributable to cigarettes' contribution to the very diseases you've mentioned.

That's what *The New York Times* is selling, for profit.

I would repeat the challenge I made in that letter:

1. That *The Times* write and publish an editorial entitled "Why *The New York Times* Advertises Cigarettes," and after a suitable period publish a representative sampling of your readers' comments on the editorial; and
2. That *The Times* include in that editorial a succinct, but adequate and informative, "financial disclosure," so that its readers may know what part revenues from cigarette advertising play in the economic life of *The Times*.

Sincerely,
George F. Gitlitz, MD

October 5, 1981

Dear Dr. Gitlitz:

Your letter of September 1, addressed to Mr. John B. Oakes was referred to this department.

We have frequently considered whether we should ban all cigarette advertising from the paper. We always come to the same conclusion; that is, that we should not.

In our view, The Times *should keep its columns as open as possible—even to those with whom we may disagree. This does not mean that we abrogate our responsibility for good taste or fairness. It does mean, however, that we accept advertising in a wide range of categories where the message may be in conflict with the editorial opinion of the paper.*

Thank you for writing.

Sincerely,
Robert P. Smith
Advertising Acceptability

* * *

June 24, 1982

"Topics" Editors
Editorial Page
The New York Times
New York

Gentlemen:

Re: "Puff Huff"
(a *Times* comment on misleading promotions
for low-tar cigarettes)

For years, in countless letters, I have tried to persuade *The New York Times* to discuss on the Editorial Page its own policy of advertising cigarettes. I have long since given up.

The letters were always shunted to the "Manager of Advertising Acceptability." and I was repeatedly sent the standard form explaining *The Times'* stout devotion to such principles as 1) if a product is legal, *The Times* sees no reason not to advertise it; 2) well-informed adults should be able to make important decisions; e.g., to smoke or not to smoke, by themselves; 3) *The Times* was in the forefront of publishing health warnings in its ads even before the FTC required them—and other such self-serving apologies. But never in print.

And on one occasion—May, 1975—I pointed out that ads running in *The Times*, for "Saratoga 120's," were blatantly misleading, and I detailed the reasons why. No reply.

And now *The Times* looks down its Topical nose at the cigarette-makers—who, like *The Times*, are only trying to turn an honest dollar—for "deceptive advertising"!

Come, Gentlemen, isn't *all* cigarette advertising deceptive? Isn't the difference quantitative, not qualitative? Wouldn't honest men differ in the way they define "rip-off"? My definition, for example, would include photos of beautiful girls and handsome men smoking and engaging in "healthful" activities, the implication being that smoking is compatible with beauty and health—which it ain't.

Gentlemen, *you* market that product. *You* participate in all those deaths. And you talk about laughing?

George F. Gitlitz, MD

No reply.

* * *

On May 25, 1983, after reading a front-page article in The Times *headlined "Health Chief Calls AIDS Battle 'No. 1 Priority,'" Dr. Gitlitz wrote a letter to the editor of* The Times *pointing out the enormous attention paid by the media (and the Department of Health and Human Services) to AIDS, Legionnaire's disease, and certain other outbreaks of illness, in contrast to the veritable absence of coverage of the far more devastating epidemic of cigarette-caused diseases and deaths. The letter concluded with a quote from* A History of Public Health in New York City 1866–1966 *by John Duffy:*

> In glancing back over the history of any city's health, one cannot help being struck by the disparity between the diseases which aroused the greatest fear and drew most attention and those familiar disorders which were responsible for the major share of morbidity and mortality.
>
> Tuberculosis, pneumonia, and other respiratory disorders were the chief cause of death in New York City, and enteric or diarrheal diseases, the prime source of infant mortality, a close second. But they were constantly present, and their insidious ravages were accepted as the normal order.

The letter was not published, and no reply was received.

"Precious baby"

MARY ANN CROMER, MD

> You've become accustomed to seeing magazine and newspaper articles that say that smoking can harm your unborn child. Studies do show that smoking mothers, on the average, have slightly lighter weight babies. Yet with more women reportedly smoking, infant mortality rates keep reaching historic lows. Some studies have shown that the lighter babies of smoking mothers actually have better survival rates than similar weight babies of nonsmokers.
>
> —from *The Cigarette Controversy*, a pamphlet
> distributed by The Tobacco Institute,
> 1776 K Street NW, Washington, DC 20006

"PRECIOUS BABY," read the T-shirt of the very pregnant young woman in the Newark, New Jersey, airport. Yet there she sat dragging luxuriously on a Virginia Slims, supplying herself and her desired child-to-be with a dose of nicotine, carbon monoxide, hydrogen cyanide, DDT, and benzopyrene. No one screamed, "Stop!" or "Please don't!" No one murmured, "Disgusting!" or "How Sad." No one was discussing the contradiction between her chosen wearing apparel and her cigarette. In fact, I appeared to be the only one shaking my head in dismay at this remarkably ironic behavior. Could I have been the only one who noticed or wondered, "Does this woman have a doctor?"

It is naive to suggest that smoking by a pregnant woman in 1983 is a choice made by an informed adult, when every effort is being made by cigarette companies to undermine knowledge about the adverse effects of smoking on the fetus and on the mother herself. Indeed, surveys[1-5] have repeatedly demonstrated that when compared with those who have never smoked or who formerly smoked, persons who smoke are ignorant of the probability and severity of cigarette-caused damage. The media, especially magazines directed to women, have done little to educate. While purporting to promote the status of women, these publications contribute to their ignorance by censoring articles that would inform readers about the disproportionate health problems caused by smoking. Perhaps the most striking example is *Ms.* magazine, published by Gloria Steinem. Its May 1983 issue was devoted entirely to the topic of women's health—but without a clear emphasis on the leading cause of preventable disease and death in women: cigarettes. In its 13-year existence, *Ms.* has never published an article on smoking, but has carried hundreds of pages of cigarette advertising.

In a similar vein, athletes like Billy Jean King, Martina Navratilova, and Renee Richards, MD—who could be doing so much to encourage healthier lifestyles among teenage girls—may be assisting Philip Morris' efforts to "liberate" women by promoting cigarette dependence. They participate in tennis matches promoted with the demeaning slogan, "Virginia Slims. You've come a long way, baby."

For too long, the tobacco industry has gone unchallenged by women with its exploitation of the misconception that slimness allegedly due to smoking is preferable to a nonsmoking lifestyle. Alton Ochsner, MD, used to comment, "Who wants to be a svelte corpse?" but his quote never made the billboards at the tennis matches.

It is small wonder why cigarette companies fear the growing number of nonsmokers' rights groups led by GASP (Group Against Smoking Pollution) and ASH (Action on Smoking and Health). In the long run, the social unacceptability of smoking, which is implicit in these groups' objectives, will succeed in cutting cigarette sales. (A memorandum distributed to tobacco executives during a clean indoor-air referendum in California in 1978 made note of the fact that if every individual who smokes were to smoke just one less cigarette per day, R.J. Reynolds alone would lose $92 million in sales each year.[6]) In addition, the high visibility and increasing involvement of women in nonsmokers' rights groups provide hope that magazine publishers who unite with cigarette companies to exploit women will see fewer and fewer women buying their publications.

To this end, organizations such as the American Medical Women's Association, NOW (National Organization of Women), the American College of Obstetrics and Gynecology, the American Academy of Pediatrics, national and local PTAs (Parent-Teacher Associations), and women's religious and civic organizations must do more—far more—than they have done to stop the assault on girls and women by cigarette advertisers.

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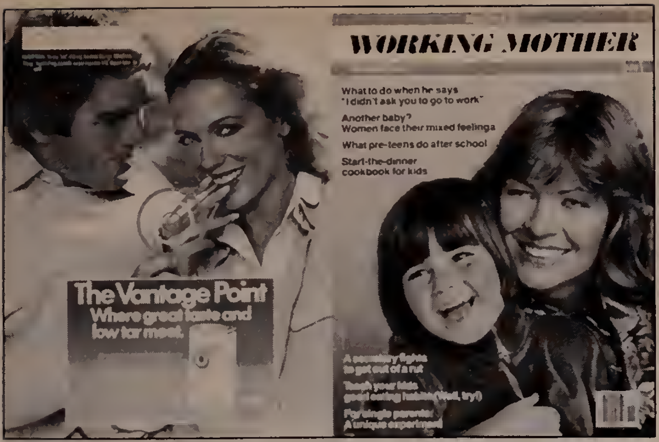
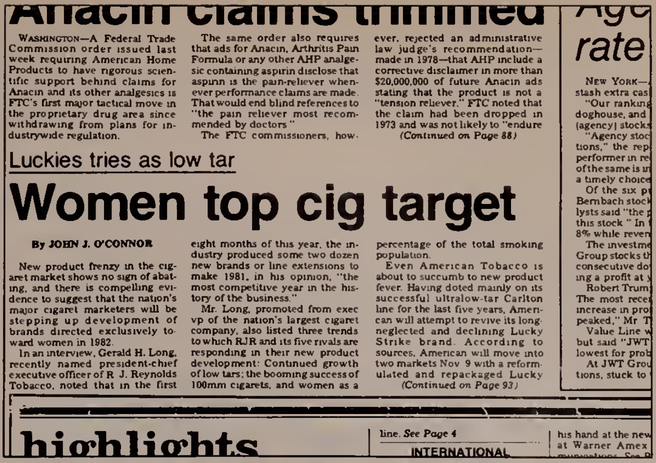

The Vantage Point
Where great taste and low tar meet.
WORKING MOTHER
What to do when he says "I didn't ask you to go to work"
Another baby? Women face their mixed feelinga
What pre-teens do after school
Start-the-dinner cookbook for kids
A secretary fights to get out of a rut
Teach your kids good eating habits (Well, try!)
For single parents: A unique experiment



Anacin claims trimmed

WASHINGTON—A Federal Trade Commission order issued last week requiring American Home Products to have rigorous scientific support behind claims for Anacin and its other analgesics is FTC's first major tactical move in the proprietary drug area since withdrawing from plans for industrywide regulation.

The same order also requires that ads for Anacin, Arthritis Pain Formula or any other AHP analgesic containing aspirin disclose that aspirin is the pain-reliever whenever performance claims are made. That would end blind references to "the pain reliever most recommended by doctors."

The FTC commissioners, however, rejected an administrative law judge's recommendation—made in 1978—that AHP include a corrective disclaimer in more than $20,000,000 of future Anacin ads stating that the product is not a "tension reliever." FTC noted that the claim had been dropped in 1973 and was not likely to "endure

(Continued on Page 88)

Luckies tries as low tar

Women top cig target

By JOHN J. O'CONNOR

New product frenzy in the cigaret market shows no sign of abating, and there is compelling evidence to suggest that the nation's major cigaret marketers will be stepping up development of brands directed exclusively toward women in 1982.

In an interview, Gerald H. Long, recently named president-chief executive officer of R J. Reynolds Tobacco, noted that in the first eight months of this year, the industry produced some two dozen new brands or line extensions to make 1981, in his opinion, "the most competitive year in the history of the business."

Mr. Long, promoted from exec vp of the nation's largest cigaret company, also listed three trends to which RJR and its five rivals are responding in their new product development: Continued growth of low tars; the booming success of 100mm cigarets, and women as a percentage of the total smoking population.

Even American Tobacco is about to succumb to new product fever. Having doted mainly on its successful ultralow-tar Carlton line for the last five years, American will attempt to revive its long-neglected and declining Lucky Strike brand. According to sources, American will move into two markets Nov 9 with a reformulated and repackaged Lucky

(Continued on Page 93)

rate

NEW YORK—
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"Our ranking
doghouse, and
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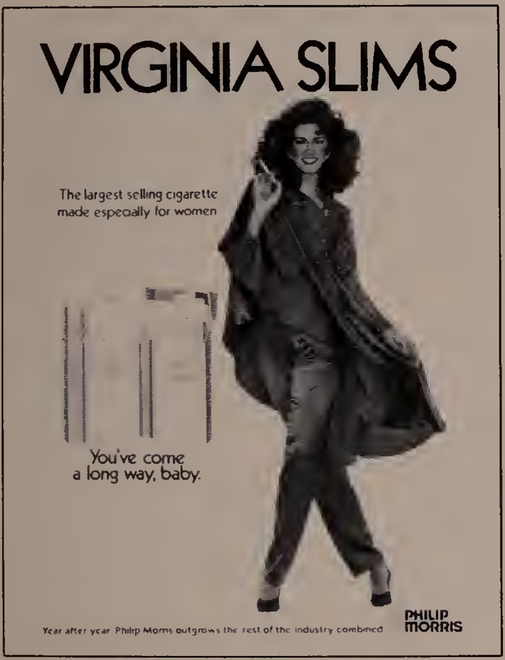
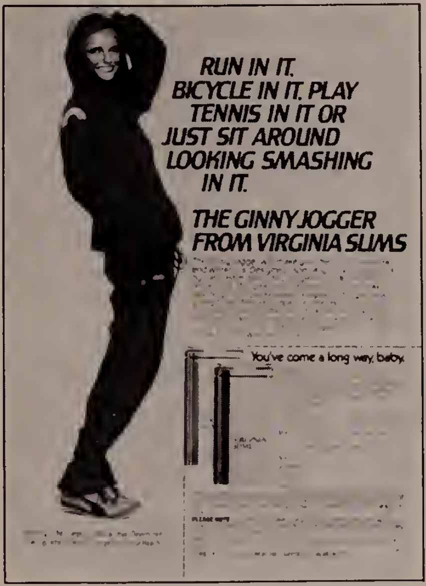
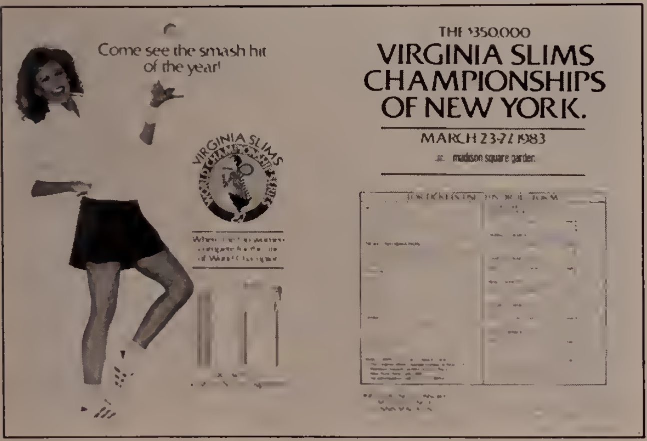
line. See Page 4

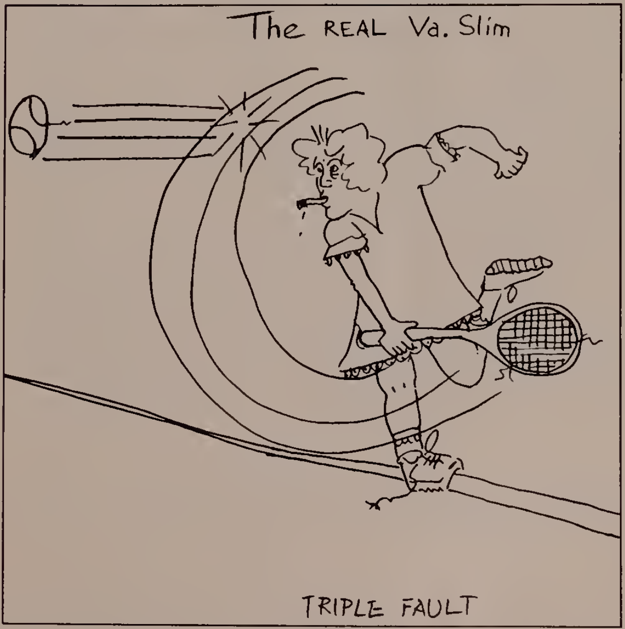
INTERNATIONAL

his hand at the new
at Warner Amex


VIRGINIA SLIMS
The largest selling cigarette made especially for women
You've come a long way, baby.
Year after year Philip Morris outgrows the rest of the industry combined
PHILIP MORRIS


RUN IN IT. BICYCLE IN IT. PLAY TENNIS IN IT OR JUST SIT AROUND LOOKING SMASHING IN IT.
THE GINNY JOGGER FROM VIRGINIA SLIMS
You've come a long way, baby.


Come see the smash hit of the year!
VIRGINIA SLIMS
THE $350,000
VIRGINIA SLIMS CHAMPIONSHIPS OF NEW YORK.
MARCH 23-27, 1983
madison square garden.



"Women top cig target" reads the headline in *Advertising Age*, September 28, 1981 (top R) and the message is clear: cigarette makers will go to great lengths to create imagery that glorifies the woman who smokes. An advertisement in the *United States Tobacco Journal* (middle L) lacks the health warning, as do many advertisements in store displays. The advertisement for the Virginia Slims Ginny Jogger suit (middle R) may be the only fitness ad ever with a health warning at the bottom. While Philip Morris touts its Virginia Slims tennis tournament at $20 a ticket (bottom L) a group of medical students at the University of Miami protested the tournament in 1978 and created a poster (bottom R) of the *real* Va. Slim. Yes, Virginia, there is a lung cancer.

Doctors who smoke

RICHARD C. BATES, MD

It is to the credit of the medical profession that physicians as a group smoke at only about half the rate for the general population; it is to the individual doctor's discredit that he smokes at all. That discredit has medical, moral and philosophic components.

In the psychiatric, medical mode, it is healthy to like oneself: to "feel good" or "I'm OK" about oneself; to have a positive self-image. Psychiatrists were once called "alienists" because they treated people who were alienated—not only from the rest of the world but from themselves. Indeed, those two cannot be separated. As Eric Fromm pointed out, one can only love others to the degree and depth that one loves oneself.

The doctor-smoker cannot approve of himself as a smoker. Well, perhaps there *are* three ways out of that certainty, but all incompatible with being capable of medical practice: (1) He might be ignorant of the effects of smoking on health, (2) He might deny that preservation of health is important, or, (3) He might be psychotic or brain-damaged. Otherwise, he is alienated within himself. He carries out an act that he, as a proper physician, must disapprove.

Philosophically, the smoking physician doesn't fare very well, either. As a person who belongs to a profession, he is a "professor," ie, one who professes to have certain knowledge and skills. Physicians originally professed to be able to heal the sick; in quite recent times they have been additionally burdened with responsibility for *preventing* illness. Even radiologists and pathologists, who only detect illness, in so doing, profess to stand between a patient and a greater degree of illness.

"Professing" is a dignified word for "selling." Doctors sell themselves as health experts and as being able to bring a desirable product to their customers. Recently, some of them have even placed advertisements to that effect in telephone books and news media.

Philosophically, then, a physician who smokes is marketing a product, health preservation, that he does not buy and use himself. He is in the position of a policeman who breaks the law; a clergyman who sins; an accountant who over-draws his checking account; a banker who goes bankrupt, or a Ford dealer who drives Chevrolets.

Then there's that touchy subject, morality. Theologically, our bodies are sacred. That being the case, anyone who willfully damages his body, sins. More than that, it is immoral for a physician, a parent, or anyone else to carry out a negative act that influences others to do the same. As physicians, we enjoy the privileges of being exemplars: admired, significant pacesetters for society. How many times have we all been chided by laymen at social functions for eating saturated fats, drinking alcoholic beverages or being corpulent? These tiresome gibes, tasteless attempts at humor though they may be, express a common belief that, when it comes to health preservation, a physician is obligated to "set the pace." A physician who breaks health rules tells laymen either that the rules aren't important, or the physician is a mere, frail mortal and not a god at all. The belief that physicians are specially anointed people is the same for the smoking layman's silliest rationalization: "You doctors smoke." To the extent that physicians are more influential, their misbehavior is more damaging to others.

Given such devastating arguments against smoking, how can so many otherwise reasonable, admirable members of our ranks continue it? As with any other behavioral disease, the person who continues to perform a self-damaging act derives more pleasure from that act than pain from its consequences. This is most likely if one can avoid reality by dodging behind an array of psychologic mechanisms: denial, projection, rationalization, to name the common ones.

But underlying all health-threatening behaviors is the one defense dangerously attractive to physicians: a magical belief in one's omnipotence. That's what any driver displays when he doesn't fasten his seat belt; what the physician-pilot feels before his plane crashes in bad weather; what youngsters believe when they inject street drugs; what the cigarette smoker rationalizes: "Cigarettes cause emphysema, heart attacks and cancer—but only in other people, *not me*."

How often have we all seen that emotion in our suddenly sick patients: surprise! "But, doctor, I didn't think this could ever happen to *me*." Or, "I thought that only happened to other people." What a special surprise it is to physicians to discover that cigarettes, storms, heart attacks, cancer and the laws of probability all apply to us in exactly the same ways, with no respect whatsoever for our medical degrees.

Meanwhile, how are the rest of us to reply when our patients say, "But you doctors smoke"?

Looking ahead, medical school admissions committees could snuff out smoking among future doctors by rejecting premedical students who smoke. As long as we're turning away hundreds of well-qualified medical school applicants every year, there's a certain justification in favoring those who husband their health.

—RICHARD C. BATES
Smokers shouldn't be admitted to med school
Medical Economics 1975;52(10):80-90.

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Are physicians to blame if patients smoke?

Sheldon B. Cohen, MD

In working with patients, studying the smoking behavior of health professionals, and attempting to influence medical organizations and institutions, the preponderant attitude I have found is one of ambivalence. For some patients, stopping smoking, despite obvious gains in health and a sense of accomplishment, remains tinged with feelings of resentment and deprivation.

Similarly, although the treatment of patients who stop smoking and shift to a healthier lifestyle is a gratifying professional achievement, the attitudes of physicians in medical societies are sometimes more ambivalent than those of patients. On the surface, all physicians acknowledge that nonsmoking is desirable, but they may be indifferent about taking responsibility for smoking, whether in their patients' lives, their offices, or in meetings of their professional societies.

I have attempted to influence medical organizations to which I belong by suggesting that they put into practice their knowledge of preventive medicine and make offices, hospitals, and meetings smoke-free. These organizations frequently do not know how to handle the matter; they may refer it from committee to committee or may respond that preaching may be tolerable only so long as it does not interfere with "smokers' rights." Some hospital administrators have even bemoaned the loss of income from the sale of cigarettes.

Why are physicians, who themselves have given up smoking more dramatically than any other group, often apathetic or downright hostile to the concept of promoting nonsmoking? The underpinnings of the attitudes of each physician toward smoking are rooted in the matrix of significant, unique early-life experiences. Among the crucial factors that determine involvement in discouraging smoking may be the physician's own smoking habits, other drug dependencies, or a serious disease or death from a smoking-related illness in a close friend or a relative.

Most relevant to the pervasive passivity of all too many physicians are the attitudes and behaviors that derive from society at large. Although we may pride ourselves on being more altruistic and self-sacrificing than ordinary mortals, our similarities with the rest of humanity outweigh our differences. The resistance of medical organizations and institutions to change from an illness orientation is not really surprising. Nor is this phenomenon unique to medicine. In all fields, success is directly related to the size of the problems confronted and "solved." Thus, generals seek larger armies and more weapons, lawyers look for more cases to litigate, and accountants are wont to make financial matters more complicated. Medicine's critics might well believe the conspiratorial theory that in a time of a physician surplus the only way for physicians to maintain a proper share of patients is to increase the number of people they diagnose as ill! Although this is nonsense, such indeed may be the case unintentionally in those physicians who focus on the performance of intricate, technical maneuvers and ingenious diagnostic tests at the expense of trying to understand the overall patient. They may perfunctorily tell patients they should not smoke but do not consider it part of their duties as physicians to assist them to stop smoking or to refer them for help "unless they ask for it." Most physicians appreciate the intellectual stimulation of rare diseases and complex diagnoses. And beating one's colleagues into print with a report of some new finding does give one a feeling of pride. Why is that zeal lacking when it comes to the health education of patients? Insurance companies pay surgeons and hospitals princely sums for procedures to bypass clogged coronary arteries, but how many of the same companies are willing to pay a fraction of the cost of surgery to the physician who teaches the patient how to modify lifestyles?

We do need to reassure our patients that we realize that smoking may have many complicated origins and that it may be difficult to stop. But we can most assuredly add that ending their dependence on cigarettes may be one of the most rewarding accomplishments of their lives. Similarly, the onus for creating smoke-free hospitals should not be on physicians concerned about smoking to explain the cost effectiveness and improved quality of the environment, but rather on those who administer the organizations to explain why they have done so little.

One might wonder why a psychiatrist should be particularly concerned about the prevention of smoking-related diseases, while some mental health care facilities still use cigarettes as rewards for appropriate behavior. For one thing, it is neither pleasant nor healthful to breathe the tobacco smoke of others. For another, the treatment of physically well and highly motivated patients is much less stressful and enervating than that of individuals preoccupied with the ravages of physical illnesses. Consider the case of a colleague who provided a lengthy but ultimately successful treatment for a man with a serious mental illness, only to watch him die shortly thereafter from lung cancer. This therapist eliminated smoking in his office as a first step in a more prevention-oriented practice, for he had been convinced that in no way could he further facilitate self-destructive behavior by his patients.

Dr Cohen is a psychoanalyst and past vice-president of the American Society of Clinical Hypnosis.

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Cigarettes and fire deaths

ANDREW McGUIRE

According to the United States Fire Administration, fires caused by cigarettes kill over 2,300 men, women and children—and burn over 5,000 others—each year in the United States.[1]

In 1981 there were 65,000 fires caused by cigarettes, resulting in $300 million in property damage. Local, state, and national fire data all list cigarette-caused fires as the leading cause of fire fatalities. In one study of 530 fire fatalities in Maryland between 1971 and 1977, 45% of fatalities occurred in fires caused by cigarettes; the next highest category occurred as the result of heating equipment (8% of fatalities).[2]

There are three ways to prevent fires caused by cigarettes. First, persons who smoke can be warned against smoking in bed and reminded to dispose of cigarette butts properly. Since half of all victims of cigarette fires are intoxicated, warnings may not be heeded.

The second approach, favored by the tobacco industry, would be to make the environment more resistant to fire from a smoldering cigarette. By adding chemicals to fabrics and by changing the construction of furniture, some progress has been made in reducing the likelihood of cigarette fires. However, the existing furniture, carpets, mattresses, and bedding will be in use for the next two or three decades and thus cannot be rendered cigarette-resistant. Also, a tremendous cost would be passed on to the consumer: furniture industry estimates are between $1 billion and $2 billion. Even then, the mutagenic and carcinogenic potential of the chemicals used in fire-proofing has become a cause for concern.

The third method would be to modify the source of ignition, the cigarette, which the tobacco industry claims is not possible.

There have been four studies that have shown the feasibility of a fire-safe cigarette. The first was conducted by Arthur D. Little, Inc., Cambridge, MA, in 1974.[3] The conclusion of the report suggested that if cigarettes were manufactured to self-extinguish within 10 minutes of being placed on furniture, then ignition would most likely not occur. In 1981, the National Bureau of Standards issued a report on the initial work for developing a fire performance standard for cigarettes.[4] Three brands were shown to have less potential for igniting furniture: Carlton (American Brands), More (R.J. Reynolds), and Sherman's (Nat Sherman). In contrast, Pall Mall (American Brands) and Viceroy (Brown and Williamson/BAT) consistently ignited the furniture. In another study, the US Testing Company found that More and Sherman's did not ignite the mock-up furniture, yet Benson and Hedges Menthols (Philip Morris) ignited over half the mock-ups tested.[5]

There have been over 95 patents issued worldwide for methods claiming to render a cigarette fire-safe or self-extinguishing.[6] One of these patents has been tested for fire-safety properties by the California Bureau of Home Furnishings in the State Department of Consumer Affairs. This report concluded that an American patent caused cigarettes to self-extinguish.[7]

There is no question that a fire-safe cigarette is a technically feasible product. There are two brands, More and Sherman's, that are currently sold nationwide and that have been shown to be more fire-safe than all other brands tested. In short, what the tobacco industry says it can't do, it is already doing.

According to documents from P. Lorillard (Loews) and Philip Morris Research Centers, manufacturers maintain the continuous burning of a cigarette even when it is not being inhaled by adding citrate and phosphate compounds or calcium carbonate to the paper or wrapper.[8] Thus, the intentional addition of burn-promoting chemicals, along with other factors, causes cigarettes to burn like a fuse (Fig 1).

FIGURE 1. **Conclusion of Researchers at National Bureau of Standards**

"Our preliminary work indicates that the following cigarette construction parameters may reduce ignition propensity:

- low diameter (less contact with the substrate);
- low packing density (low fuel load);
- filter (no increase in airflow at the butt end and, consequently, no increase in heat flux);
- paper with low citrate content, but not necessarily low porosity;
- high burning rate (short contact of heat source and substrate).

Cigarettes with one or more of these construction parameters are already in production. According to our best information, producers do not even know that some of their cigarettes have lower ignition propensity."

(*Letter to Deputy Director, Division of Cancer Cause and Prevention, National Cancer Institute, from John Krasny, Product Flammability Research, Fire Performance Evaluation Division, Center for Fire Research, National Bureau of Standards, U.S. Department of Commerce, May 9, 1980*)

A concern for preventing forest fires led Representative Edith Nourse Rogers (R, Massachusetts) to raise the issue of a self-extinguishing cigarette in Congress in the late 1920s. Legislation to this end was first introduced by Senator Phil Hart (D, Michigan) in 1974. In 1979 an investigative journalist, Becky O'Malley, funded by the Oakland, CA, firefighters union wrote an article for *Mother Jones*, entitled "Cigarettes & Sofas." [8] The article became the touchstone for the first widely supported campaign for a fire-safe cigarette.

Prompted by media publicity and a cigarette-caused fire in his home district in which a family of seven was burned

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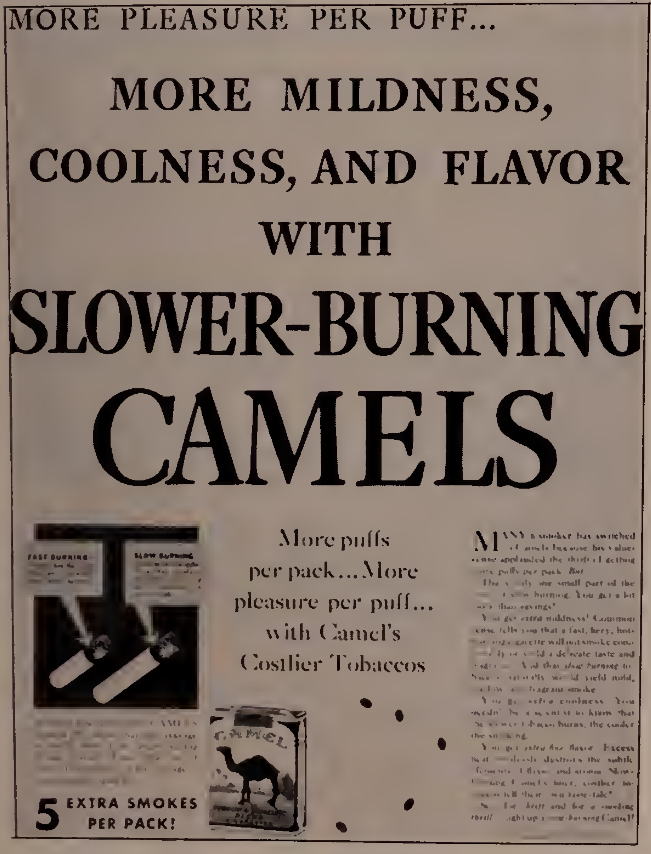
Address correspondence to Mr McGuire, Executive Director, Trauma Center Foundation, San Francisco General Hospital, San Francisco, CA 94110.

to death, Representative Joseph Moakley (D, Massachusetts) introduced legislation in 1979 calling for a fire-safe cigarette. The same year, after a lobbying effort by the Junior Leagues of California, Senator Alan Cranston (D, California) introduced a companion bill in the Senate. The first hearing of the House bill occurred on March 21, 1983, and the bill is awaiting further action in the Subcommittee on Health and the Environment. The first hearing in the Senate was on July 28, 1983, in the Special Committee on Aging, chaired by Senator John Heinz (R, Pennsylvania). Further action is expected later in the session.

There have been legislative efforts on the state level. In 1980 Oregon became the first state to act. The Oregon bill, which called for fire-safe cigarettes to be sold in the state three years after passage of the bill, passed the Senate but was killed in a House committee. Since then eight states, including California and New York, have introduced fire-safe cigarette legislation. In 1983, the bill passed the New York Assembly 123 to 13, only to die in the Senate. A similar sequence of events took place in Connecticut.

In May 1979, the American Burn Association asked cigarette manufacturers for their views on fire-safe cigarettes. The Board of the American Burn Association wanted to know the official stand of the companies before the Association would support a fire-safe cigarette campaign. There was no response from any company (but see Fig 2).



MORE PLEASURE PER PUFF...

MORE MILDNESS, COOLNESS, AND FLAVOR WITH SLOWER-BURNING CAMELS

More puffs per pack...More pleasure per puff...with Camel's Costlier Tobaccos

5 EXTRA SMOKES PER PACK!

FAST BURNING
SLOW BURNING
CAMEL

FIGURE 2. In 1939 RJ Reynolds was proud to advertise its slow-burning cigarette. In 1983 the tobacco industry denies it can come up with a cigarette that will burn out when unattended, even though Reynolds' MORE brand has been shown to do just that. Neither cigars nor pipes nor cigarettes will keep burning while unattended. Selling cigarettes that burn continuously makes for higher sales—and higher costs to society for fires and burn deaths and injuries. (Photograph courtesy, DOC Archive)

The only document on fire-safe cigarettes produced by the Tobacco Institute was delivered by A. W. Spears, PHD, Executive Vice President, P. Lorillard, as testimony during Congressional hearings on March 21, 1983.[6] The document states that there is no science available to render cigarettes fire-safe. It also concludes that:

> ... cigarettes made with low porosity paper (7 CORESTA units) produced a mainstream smoke condensate which was more tumorigenic on mouse skin than that produced from cigarettes with paper porosities greater than 25 CORESTA units.

All tobacco industry arguments presented in the media and in state hearings have been based on the Spears work.

The success of the tobacco industry thus far in thwarting legislation for the fire-safe cigarette has not prevented the Tobacco Institute and individual companies like Philip Morris from contributing money and equipment to various fire-service organizations through the United States, most often in states that are considering passage of measures prohibiting tobacco manufacturers from continuing to add burn-enhancing chemicals to cigarettes. The Tobacco Institute has given nine fire departments between $5,000 and $10,000 worth of supplies apiece for fire prevention efforts. In testimony before the Subcommittee on Health and Environment in March 1983, Horace Kornegay, Chairman of the Board of the Tobacco Institute, named New York City, Seattle, Des Moines, Boston, Milwaukee, Chicago, Detroit, Baltimore, and Portland, Oregon as recipients of money from tobacco interests.[9] In addition, the National Volunteer Fire Council has received materials that were developed by the New York public relations firm of Burson-Marsteller, and the Foundation for Fire Safety (a Virginia-based, tobacco-funded organization) was given $50,000 to develop a high school fire safety curriculum in the State of New York. The Tobacco Institute has donated $640,000 to the National Fire Protection Association, the organization that sets fire codes, for a smoke detector program.[10] In December 1982, *Firehouse* reported that "For its service and commitment to fire safety, Philip Morris USA has received the Fire Department of New York City's Fire Prevention 1982 Award, presented annually to corporations which have helped foster and underwrite the department's fire prevention efforts." In April 1983 *Firehouse* noted another award:

> In appreciation for his corporation's ongoing financial and technical support of the Fire Department of New York, Shepard Pollack, president of Philip Morris USA, was recently named a deputy chief of the department.

There are three areas of activity that will be pursued in the coming year. First, there will be an expansion of the coalition that will lobby state capitals and Washington, DC. Second, the fire-safe cigarette campaign will emerge in other countries and will become an international campaign. Third, there will be personal-injury and product-liability suits filed on the behalf of victims.

Mierley and Baker[11] have noted that during a three-year period 39% of all cigarette-fire deaths in urban residences were innocent victims. This is the one nagging problem for cigarette manufacturers: the entire population, especially infants, children, disabled people, and the elderly, is at risk because of the carefully "planned obsolescence" of the American-made cigarette. A fire started by an apartment dweller, a houseguest, a hospital patient or employee, or a hotel guest can burn or suffocate neighbors who are asleep or incapacitated, or who live on high floors. When the tobacco industry refuses to change its product to stop deaths and burn injuries, it expands a credibility gap that cannot be bridged by claims that "more research is required." The industry is withholding a solution to a grave public health problem, and no longer is this being excused by members of state legislatures and Congress in the name of free enterprise.

Acknowledgment. Organizations that support the Cigarette Safety Act include the American Burn Association, the American Medical Association, the American Public Health Association, the International Association of Fire Chiefs, the International Association of Fire Fighters (AFL-CIO), the Junior Leagues of California, the National Fire Protection Association, the Phoenix Society, and numerous fire departments.

Note: *Mr McGuire has produced two films on the tragedy of burn injuries*, Here's Looking at You, Kid *and* Heroic Measures. *He also aided the production of* Sleeping Death, *a documentary for KRON-TV (San Francisco) on the subject of cigarette-caused fires.*

A highly acclaimed film on the subject, Hospitals Don't Burn, *is available for showing from Pyramid Films, PO Box 1048, Santa Monica, CA 90406.*

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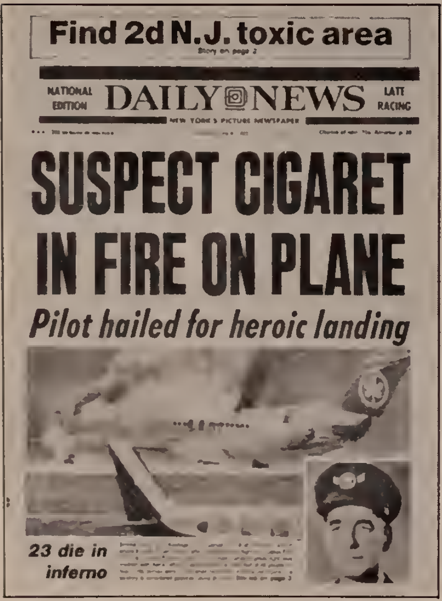

Find 2d N.J. toxic area

NATIONAL EDITION DAILY NEWS LATE RACING

SUSPECT CIGARET IN FIRE ON PLANE

Pilot hailed for heroic landing

23 die in inferno

CIGARETTE FIRES ON AIRPLANES

Citing three fires in 1983 aboard commercial aircraft which were caused by smoldering cigarettes and which resulted in numerous fatalities, the Air Travelers Safety Association has urged the Civil Aeronautics Board (CAB) to ban smoking on airliners. A bill in Congress (HR 3847) calling for such action has been introduced by Rep. Bob Traxler (D, Michigan).

The Association, headed by William Plymat, Sr, chairman emeritus of Preferred Risk Mutual Insurance Company and a member of the Presidential Commission on Drunk Driving, is also urging support for a return to the two-drink limit aboard commercial aircraft as a means of curbing careless smoking by intoxicated persons which may lead to fires. A bill to prohibit airlines from offering free drinks (HR 54) has been introduced by Rep Charles E. Bennett (D, Florida).

Further information may be obtained by writing the Air Travelers Safety Association, 2908 Patricia Drive, Des Moines, IA 50322.

The New York Cigarette Fire Safety Act

HON. ALEXANDER B. GRANNIS

> An 11-year old girl whose six-year old sister was killed by a fire in their Stony Brook, Long Island, home early Wednesday morning, died yesterday . . . . The girls were asleep in their home when smoke and heat—the result of a fire that started with a smoldering cigarette in a downstairs den—billowed up the stairway to their bedrooms . . . .
>
> *Newsday*, May 14, 1982

The deaths of the children who lost their lives in this fire become even more senseless when viewed in light of the fact that this tragedy and other fires like it could have been prevented.

Despite the tobacco industry's claim that no such cigarette exists in a form that the public would want to smoke, there is strong evidence that cigarettes, the leading cause of residential fire deaths in the United States, can be made fire-safe.

The tobacco lobby continues to obfuscate the facts regarding the feasibility of a fire-safe cigarette. It is interesting to note that the same industry that insists cigarettes, regardless of tar and nicotine level, do not pose any health risks, expresses its concern that a fire-safe cigarette will lead to increased tar and nicotine. The National Bureau of Standards has shown no correlation between a cigarette's level of tar and nicotine and its propensity to ignite furniture.

Nothing in the actions and attitudes of the tobacco industry suggests it is capable of voluntarily acting in the public interest. It is for this reason that Senators Ralph Marino (R-C, Nassau), Emanuel Gold (D-L, Queens), and I have introduced the Cigarette Fire Safety Act (A3814/S3059), a bill that will require the New York State Office of Fire Prevention and Control to set fire safety standards for cigarettes sold in New York State. The standards would ensure either that cigarettes go out in a few minutes when not puffed or that they meet some other performance standard to limit the risk of igniting mattresses or other household furnishings.

The Cigarette Fire Safety Act has received support from every major professional and volunteer firefighter organization across the State, as well as burn surgeons and burn victims, the State PTA, the Secretary of State, the Commissioner of Environmental Conservation, and many others. The Tobacco Institute, the public relations arm of the six major tobacco companies, is the only opponent of this legislation, but its power should not be underestimated. It is one of the richest and most aggressive lobbies in the country, and it opposes any effort to regulate its clients in any way.

The tobacco companies' vehement opposition to any form of regulation is also apparent in their efforts to stop another proposed measure, Assembly Bill 939, which would require manufacturers of cigarettes to provide the Commissioner of Health with a list of chemical substances used in the manufacture of their products.

Unlike the manufacturers of other consumer goods, cigarette manufacturers are not required by any state or federal regulatory agency to disclose what is in their products. The tobacco industry has managed to exclude cigarettes from classification as a food, drug, or hazardous substance. According to the most recent US Surgeon General's report, there are a startling number of chemical components in both the gas and particulate phases of cigarette smoke, such as toluene, a narcotic affecting the central nervous system, and vinyl chloride, a known liver carcinogen.

The Tobacco Institute claims that state legislation is unnecessary because the six major cigarette manufacturers have made available to representatives of the US Department of Health and Human Services (HHS) a list of all ingredients commonly used in cigarettes. However, the agreement with HHS specifies that the manufacturers disclose only those ingredients that are added by three or more manufacturers or by any single manufacturer in a substantial amount. It is left to the manufacturer to determine what exactly will be considered a "substantial" amount.

I do not believe that it should be the responsibility of public or private health agencies to struggle through complicated testing procedures in an attempt to identify the chemical additives in cigarettes. The public has the right to know about the toxic effects of the chemicals they encounter as a result of their exposure to cigarette smoke, and the cigarette companies have a responsibility to provide the necessary information.

HOSPITAL FIRE TRAPS THREE

Dade Hospital Is Hit By Fire; 46 Patients Taken Out Unhurt

Newspaper headlines. Cigarette-caused fires hurt the most vulnerable members of society.

Address correspondence to Assemblyman Alexander B. Grannis, Room 522, Legislative Office Building, Albany, NY 12248.

The Minnesota Clean Indoor Air Act

A model for New York and other states

HON. PHYLLIS L. KAHN

In my ten years in the Minnesota legislature, the issue which has received the most attention from both the press and public has been the 1975 Minnesota Clean Indoor Air Act, of which I was the chief sponsor. This was not the first law to attempt to control smoking in public places, but it was the first one to use the comprehensive approach of saying that smoking would be prohibited everywhere unless it was specifically permitted. How did Minnesota come to pass a law which has been lauded by health professionals but criticized by the tobacco lobby as restrictive and confusing and the first step in the total destruction of personal freedoms?

The first reason was the work of a persistent and devoted (although small and new) organization, the Association for Non-Smokers' Rights (ANSR). Its activities included helping to write the bill, getting witnesses before committees, writing letters, and maintaining visibility in the legislative process at every stage. ANSR was supported by organizations such as the American Lung Association and the American Cancer Society, and most other health bodies in the state. One of the important jobs performed by the American Lung Association was the publication of a popular pamphlet translating part of a report of the Surgeon General into words that even legislators could understand. A former Surgeon General, Jesse Steinfeld, MD, testified before the legislature a year before passage. Charles Mayo, MD, a local physician and a descendant of the famous medical family, gave further testimony. Without the support of these and other physicians the bill may well have failed.

Another help was a dramatic change in the composition of the Minnesota legislature from older individuals who smoked to younger nonsmoking members (the nonsmoking majority has increased at each election). Also, there is no sizeable tobacco industry in the state, in contrast to neighboring Wisconsin where a small tobacco industry has blocked similar legislation. Perhaps the most important reason for passage of the law is its reasonableness: it doesn't prevent anyone from smoking but requires certain easily adopted protective measures such as dividing restaurant dining areas, meeting rooms, and working areas. (If such measures do not result in a smoke-free atmosphere for the nonsmoker, then the entire area must be made nonsmoking.)

The law was backed up by a clear set of regulations written by the Minnesota Department of Health, again with the advocacy and assistance of volunteer groups. People have said that the law might be useless because of a lack of enforcement, but one of the major difficulties in enforcement has turned out to be the major strength of the law. Certain other states have listed a greater or lesser number of places where smoking is prohibited. The Minnesota law takes the step of forbidding smoking everywhere unless it is specifically allowed, but this step is psychologically far more difficult for people to understand. This single line in state law required a massive change in cultural attitudes. Yet the very existence of the law, and the attendant publicity, is important. Few people continue to smoke when it is pointed out to them that it is against the law. Despite the complaints and some inadequate compliance, most restaurants initially had small but definite smoke-free areas. By a more recent revision of the rules, they are now required to have a minimum of 30% of their seats designated nonsmoking. In this respect, the voluntary groups took the lead in education and in the insistence on the right to a smoke-free environment.

Although this measure was not aimed at individual smoking deterrence, but rather at protection of clean indoor air, it has had an interesting effect on those who continue to smoke. This is probably why the tobacco industry became so interested in it, albeit belatedly in Minnesota. It turns out that as smoking is considered socially and legally unacceptable, and also as it becomes more difficult to smoke, people smoke far less. Legislators who smoke have told me that with the passage of the nonsmoking rule on the floor of the Minnesota House, their cigarette consumption has gone way down just because of the additional effort it takes to go someplace else to smoke. I also believe the bill passed in part because it was not taken very seriously by its opponents. They thought it was such a completely ridiculous thing to do that they kept laughing at it all the way to the governor's office. Only after it was signed (unlike in Illinois and Maine, where the tobacco lobby has succeeded in obtaining gubernatorial vetoes of similar legislation) did they start complaining about curtailment of rights.

In a Roper Organization poll prepared for The Tobacco Institute, A Study of Public Attitudes Toward Cigarette Smoking and the Tobacco Industry in 1978, the conclusion was reached that the nonsmokers' rights movement is "the most dangerous development to the viability of the tobacco industry that has yet occurred." The economic effect of reduced smoking will also be formidable. From the *Tobacco Observer*, September 18, 1980, one learns that if each American smokes one less cigarette each day, the resultant loss to the tobacco industry is $500 million a year.

Specific funding for enforcement has never been appropriated, since the added workload in the implementation of this Act has been absorbed by the State department of

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Based on a presentation delivered at the Fifth World Conference on Smoking and Health, Winnipeg, Canada, July 11, 1983.

Address correspondence to Ms Kahn, Member, Minnesota Legislature, District 58B, 100 Malcom Av., SE, Minneapolis, MN 55414.

health. This includes establishing and modifying appropriate rules, answering complaints, and adding compliance with the Act to the list of items in health inspections. The average cost to the department has been about $4,600 per year for the past three years. The placement of signs is a responsibility of the supervising authority or proprietor of any public place and is a minimal cost. (In Michigan, where legislation was also passed requiring nonsmoking areas in restaurants, the signs were in many cases provided by the Michigan Lung Association or the American Cancer Society.) Although there is a penalty section in the law, there have been few formal summonses issued. Inasmuch as any law can be, this one is self-enforcing. Persons irritated by smoke expect to find a no-smoking section and have become more assertive in establishing their rights to such a space. Others look for smoking sections before lighting up and mistakes are generally taken care of by simple reminders. The law effectively works to simplify and reinforce rules of common courtesy.

There is a public acceptance of restrictions on smoking. In 1980, the Minnesota Poll, a public opinion survey conducted by the *Minneapolis Tribune* since 1944, found that 92% of nonsmokers and 87% of heavy (two pack a day) smokers favored the law. The Act has also been politically popular. It passed in 1975 with a good bipartisan majority, and some legislators who voted against it have become ardent supporters after conversations with constituents.

The establishment of legislation protecting nonsmokers deserves serious consideration world-wide as a useful tool in limiting smoking. As Jesse Steinfeld, MD, said in testimony before the Minnesota legislature in 1974:

> There is no doubt in my mind that in some future time a healthier group of humans will look back with horror and amazement on these three or four centuries when people voluntarily committed a slow form of suicide through smoking, and foisted a noxious environment upon their nonsmoking companions. These future citizens will regard ours as a primitive, unhealthy, unintelligent era, inexplicable except for the greed of those who manufacture cigarettes and of the governments which derive revenue from taxation thereof.

ORGANIZATIONS WORKING ACTIVELY IN BEHALF OF NONSMOKERS' RIGHTS

Alaska Council on Smoking or Health	PO Box 3-3868, Anchorage, AK 99501
Smoking and Health Action Coalition	7 S Fluorite, Tucson, AZ 85745
Californians for Nonsmokers' Rights	PO Box 668, Berkeley, CA 94708
GASP (Group Against Smoking Pollution) of Colorado	Box 39692, Denver, CO 80239
Wichita GASP	PO Box 17602, Wichita, KS 67217
Bowie (MD) GASP	PO Box 863, Bowie, MD 20715
GASP of Massachusetts	PO Box 242, Brookline, MA 02146
Association for Nonsmokers' Rights	1829 Portland Ave S, Minneapolis, MN 55404
New Jersey GASP	105 Mountain Ave, Summit, NJ 07901
New Mexico Nonsmoker Protection Projects	PO Box 657, Los Alamos, NM 87544
GASP of New York	7 Maxine Ave, Plainview, NY 11803
FANS (Fresh Air for Nonsmokers)	PO Box 24052, Seattle, WA 98124

NATIONAL ORGANIZATIONS

ASH (Action on Smoking and Health)	2013 H St NW, Washington, DC 20006
Non-Smokers' Rights Association	455 Spadina Ave at College, Suite 201, Toronto, Ontario M5S 2G8 Canada

—compiled by Regina Carlson, New Jersey GASP

A physician-led referendum for cleaner air in Florida

CHARLES FRANKLIN TATE, JR., MD

By 1970, after 20 years of writing articles and letters to the editor and speaking at schools, churches, and medical meetings in Dade County, Florida (population 1,000,000), concerning the importance of clean indoor air in public places and in the working environment, the effort was beginning to pay off. Smoking had been banned in 1972, the last cigarette machine at the 1,250-bed, tax-supported Jackson Memorial Hospital was removed, and the sale of all tobacco products on the premises was stopped. Other progressive measures soon followed in the community at large.

As with most successful health legislation efforts that are fought by vested interests, the various clean indoor air measures adopted in Dade County (affecting department stores, supermarkets, and elevators) were sponsored by a forceful elected representative who could not be bullied or bought by the tobacco lobby. When this man, Commissioner (and former United States Senator) Harry Cain, died, in 1979, all subsequent action at the County Commission ceased.

After repeated futile attempts to get the Commission to pass a Clean Indoor Air Act to cover all public places, I decided to try getting the issue directly before the public on a referendum.

Much to my dismay, none of the major health charities (American Lung Association, American Heart Association, American Cancer Society) would offer any assistance. Therefore, I turned to the local chapter of GASP (Group Against Smoking Pollution). Not only did the two leaders of this organization aid in obtaining the thousands of signatures required to get the measure on the ballot, but they worked virtually nonstop for weeks on end as Referendum Day approached.

Although as a past president of the Dade County Medical Association, I was able to get the Association to go on record in favor of the ordinance (which placed restrictions on smoking in physicians' offices), there was no appreciable support from the medical community. Many physicians openly derided our efforts, feeling that there was no way to beat the tobacco industry, which, it would later be revealed, spent more than $1 million in mass media advertising—a national record for a county referendum—to our $5,000. Less than $1,000 of our opponents' money was contributed by Dade County citizens; $297,000 came from R.J. Reynolds Tobacco Company and $225,000 from Philip Morris.

Typical of the tactics of the tobacco industry-supported opposition group Dade Voters for Free Choice, was the slogan, designed with a heavily Jewish population in mind, "DON'T LET IT HAPPEN HERE!" Incredibly, too, the local president of the Fraternal Order of Police was depicted in ads condemning the proposed ordinance. Donations were made by the tobacco companies to the Fraternal Order of Police at the time of the referendum.

On May 8, 1979, more than 192,000 voters went to the polls. The ordinance was defeated by just 820 votes—the closest election in County history. Many who had ridiculed GASP and opposed the ordinance—such as the *Miami Herald* and the *Miami News*, prime beneficiaries of tobacco company advertising dollars—begrudgingly admitted their admiration for our efforts and began supporting several of the very changes we had proposed. Had even a single health charity lent support to our effort, there is little doubt that we would have felled Goliath.

As it turned out, many restaurants and retail establishments saw in the vote that good business was not synonymous with obeisance to cigarette companies. Nonsmoking areas began to be established in many public places.

Unfortunately, there was little impact on the workplace, so in 1980 we went through the same battle, sure that this time the voluntary agencies and the medical community and the media editorialists would join in. They did not, and a less-restrictive ordinance was defeated by a wider margin than the 1979 vote. The tobacco companies, calling themselves FAIR (Floridians Against Increased Regulation), pumped in $600,000, only $185 of which was contributed by Floridians. We raised $3,200 and were unable to compete with or challenge the legality of ads by FAIR which suggested the law would deal no differently with smokers than with murderers and rapists.

As a professor of medicine and pulmonary diseases for many years, I have witnessed the suffering of thousands of victims of cigarette smoking. Cases of squamous cell carcinoma of the lung in individuals who never smoked can be counted on the fingers of one hand—except possibly for the spouses of persons who smoke. From the workplace, countless patients, nonsmoker and former smoker alike, are pleading for relief from fetid, allergenic air caused by tobacco smoke.

Although the American Medical Association has written up a model for clean indoor air legislation, by and large organized medicine has stood back or spoken with restraint. Ironically, as other groups challenge the medical profession's leadership role, physicians and medical societies that do not actively support such legislation are losing out on a prime opportunity to enhance their positive health image and to prove their commitment to lowering the cost of medical care in their communities.

Dr Tate is Professor Emeritus—Medicine and Pulmonary Diseases, University of Miami School of Medicine.

Address correspondence to Dr Tate, 1150 NW 14th Street, Suite 302, Miami, FL 33136.

Clean indoor-air legislation: the Illinois experience

LUKE L. BURCHARD, MD

Illinois would seem to be the ideal state for passage of clean indoor-air legislation; it does not grow tobacco, and no tobacco companies are headquartered there. It has one of the best systems of community-based medical education in the country and a trend-setting city that is home to the world's largest medical, dental, and hospital associations. Its governor, James Thompson, is the son of a surgeon and the standard-bearer of the political party of Illinois' most famous citizen, Abraham Lincoln.

It would be expected that opposition to restrictions on smoking in public places or on cigarette advertising would be led by the tobacco lobby and Illinois tobacco and candy distributors. But the state is also home to the advertising agency (Leo Burnett USA) with the world's largest cigarette account (Philip Morris' Marlboro, Merit, and other brands), to one of the Midwest's largest department store chains (Marshall Field, owned by British American Tobacco), to billboard companies which receive much of their income from cigarette advertising (and on whom politicians rely during election campaigns), and to a number of sports teams and entertainment centers that receive substantial cigarette company money. The influence of the tobacco lobby over the Chicago City Council has been such as to block attempts to pass clean indoor-air measures and even to kill attempts at prohibiting free distribution of cigarettes on public avenues and at city-sponsored events.

My personal involvement with clean indoor-air legislation began in Missouri in 1982, when as a member of Doctors Ought to Care (DOC) I testified in favor of the Missouri Clean Indoor Air Act. Physician-aided efforts there resulted in a unanimous recommendation in favor of the passage of the bill by the Public Health Committee of the Missouri House of Representatives, but the measure was never brought to the full House for consideration. After I moved to Illinois, it was a simple matter to research previous efforts at clean indoor-air legislation. The first such measure was passed by the General Assembly in 1974 but was vetoed by then Gov. Dan Walker, who claimed there was no provision for enforcement. A measure that included such a provision was passed in 1978, only to be vetoed by Governor Thompson, within minutes after meeting with cigarette company lobbyists. In 1980 the bill was stopped due to surprise opposition from the Department of Public Health which claimed that enforcement of the bill would be too costly.

I rewrote the 1983 Illinois Clean Indoor Air Act to take into account previously stated objections, especially in regard to cost and enforcement. Three State senators sponsored the measure, and we were encouraged by the initial support.

We anticipated the attempts of the president of the Senate to kill the bill, but were unprepared for the level of opposition from black and female legislators. One of the saddest ironies of the effort to pass legislation aimed at curtailing cigarette smoking and improving public health is that some of the most ardent opponents have included women and members of ethnic minorities—currently the leading targets of cigarette advertising and the fastest growing market for cigarette sales. With one exception (a paid tobacco lobbyist) all witnesses against the bill were from out of state, and all were paid by the tobacco industry. In contrast, those testifying in support of the bill came on their own time and at their own expense. They included physicians from three medical schools, members of DOC, and representatives of the Chicago Heart Association and the American Lung Association. The Coles County Medical Society officially endorsed the act, but support from the Illinois State Medical Society was minimal. The bill was sent to a subcommittee composed entirely of senators opposed to the legislation.

The complexities of health care financing have preoccupied organized medicine. It remains to be seen whether state and national medical associations will accord greater legislative priority to preventive medicine issues.

Many physicians in my county took advantage of an opportunity to expand their public health role by becoming involved in an important piece of legislation. In spite of our initial political naïveté, much has been learned from this effort, and the groundwork has been laid for future legislative successes. Public concern over both the irritant and unhealthful long-term effects of second-hand smoke, especially to children, is such that the media no longer mock or ignore the importance of clean indoor-air legislation. The grassroots public support is growing, and we shall be more savvy in translating public approval into passage of the measure.

Dr Burchard is a family physician and president of the Illinois chapter of DOC.

Address correspondence to Dr Burchard, 1810 Charleston Ave, Mattoon, IL 61938.

On November 8, 1983 voters in San Francisco approved a ballot proposition that protects the right of employees to a workplace free of tobacco smoke. Cigarette companies contributed $1.3 million to defeat the measure, while proponents raised $85,000 mostly in small donations from local citizens.

Preventing tomorrow's epidemic

The control of smoking and tobacco production in developing countries

MIKE MULLER

Consider the case of one African country where health authorities announced their intention to introduce legislation to control the promotion of smoking. They had submitted a draft law to the attorney general's office for a final version to be prepared, but there it had stayed for nearly two years. The draft had been submitted to the agriculture ministry for comment since it dealt with a crop produced in the country; the ministry had stopped the process in its tracks by the simple expedient of not replying to the letter. "The permanent secretary just sees red. He refuses to talk to me about it," complained one health ministry source. The laws that had been passed about tobacco provided for compensation to be paid, from public funds, to the country's handful of tobacco farmers should their crops be damaged by bad weather.

This case is not atypical, and certainly shows the need for proponents of smoking control to come to grips with the agricultural and industrial aspects of tobacco if they wish to control its use. The agriculture lobby is, in many countries, far stronger than the health lobby. And those who wish to promote smoking control in developing countries will have to deal with a tobacco lobby in which the farmers will play an increasingly important part.

The environmental damage done by tobacco growing, particularly in developing countries, and the limited scope for tobacco exports from Third World countries in the future are two issues on which the tobacco growers and manufacturers can legitimately be challenged. This article will focus on three more: (1) the competition between tobacco and other crops, (2) the organization of tobacco growing and manufacture—advantages and disadvantages of state monopolies for tobacco, and (3) the future of the cigarette—"safe" cigarette technologies and the interests of the Third World farmer, the manufacturer and the economy.

TOBACCO VERSUS FOOD

The most immediate of these issues is the question of the competition between tobacco and other crops, often portrayed as a competition between tobacco and food. The points that have received the most attention have been the use of land for tobacco that could be used to grow other crops, particularly food crops; and the interference of tobacco in the production of other crops because of its high labor demand at particular stages of cultivation and processing.

In some developing countries, neither land nor labor is in short supply, and there are no markets for other crops that could offer comparable returns for the farmers.

In the case of each country, it is necessary to seek the principal constraints placed on agricultural production. There are usually six such determinants in developing countries:

Land. Not just the absolute available areas are involved, but so are the areas available to farmers within the local political context. In the case of tobacco, the land required to grow fuelwood for curing should not be forgotten.

Labor. Help may be hired or may be provided by the farmer and his family. For tobacco, the labor force must be available during short periods of peak demand and must be willing to do the manual work required for the minimum wage rates essential if the crop is to be produced at competitive prices.

Capital. In Third World agriculture, the principal problem is not the availability of cash but the existence of institutions that effectively lend it to all farmers on a short- and medium-term basis.

Technical support. The availability of technical support and the institutional backup needed to make it effective may make all the difference to the viability of a crop.

Markets. Farmers will not produce crops unless they have a market for them. What is often not appreciated outside of agriculture is that it is not just the price that matters but the guarantee that the crop will be bought, the time from delivery to receipt of payment, and the location of the point of sale. The existence or prospect of a foreign market will often transform the market conditions in the many countries where foreign exchange is short. It should also be noted that although the presence of hungry people may indicate a need for food, it does not necessarily show the existence of a market for it.

Energy. A unique constraint on the production of tobacco is the energy requirement for its curing.

The questions of land, labor, and energy availability and the resultant impact of tobacco on the rural economy are easily analyzed. In a sparsely populated country like Tanzania, it will be found that tobacco growing does compete with food-crop production for labor, to the detriment of food

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Based on a presentation delivered at the Fifth World Conference on Smoking and Health, Winnipeg, Canada, July 12, 1983.

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yields. The same is not true in those parts of India where the large pool of landless laborers means that labor is not an important constraint. Similarly, in Malaysia, situated as it is in the tropical forest belt, it is not surprising to find that wood for curing is not yet a major constraint on tobacco production, but it is in the long-established tobacco-producing areas of Southern Brazil as well as in the arid fringes of Pakistan, Kenya, and Nigeria. Less well appreciated and more difficult to analyze are the questions of credit and technical and marketing support. In these areas the competition between tobacco growing and other agricultural activities is often acute.

Consider the data quoted for tobacco production in Costa Rica in the Economist Intelligence Unit (EIU) report *Leaf Tobacco—Its Contribution to the Economic and Social Development of the Third World.*[1] This purports to show the superior profitability of tobacco as a cash crop in the Parrita Valley and suggests that tobacco is respectively four and five times more profitable than the alternatives, sorghum and rice. However, the comparison is based on the assumption that equal areas of land are planted to each crop. But, because tobacco needs far more labor (4.5 times more than rice, 3.7 times more than sorghum), the comparison is only valid if land is the limiting factor on cultivation in that area. Since the average farm size in Parrita is around 25 hectares (ha) if the plantations of the United Fruit Company are excluded, the constraints that limit farmers' choice of crops are more likely to be the availability of capital on the one hand and labor on the other. A comparison of the profitability of rice, sorghum, and tobacco using either the same labor input for each or the same financial investment for each reveals a completely different picture and suggests that sorghum offers a better return than tobacco (see Table).

Support for the Farmer—The Major Constraint

Even if tobacco is not the most profitable crop, farmers may still opt to grow it. In developing countries, the choice is determined by the support available to overcome the specific constraints on each crop rather than its absolute profitability. Indeed, in the Costa Rican case, the EIU cites a farmer who chose to grow sorghum "to compare the results with his usual tobacco crop. The income was very good, he claims, but he quickly reverted to tobacco and has not considered sorghum again, a telling comment on the relative profitability of each crop." More likely, the reality is that he also wanted the financial and technical support available through the local subsidiary of British American Tobacco (BAT).

Thus, in Nigeria, "no other crop in the savanna zone of Western Nigeria receives such a highly coordinated package of assistance" wrote one commentator.[2] Kenya, where for many years tobacco production was minimal, achieved virtual self-sufficiency in just a couple of seasons when BAT (Kenya) started to support growers and finance them through company-administered Agricultural Finance Corporation loans.[3] The EIU report paints the same picture for other countries. Referring to company support for Costa Rican tobacco growers, it concludes "Probably no other crop in the Parrita area receives such careful attention as tobacco." In Karnataka State, in India, "compared with the cultivation of other dry crops, this support at field level and the orderly marketing mechanism in tobacco are in fairly dramatic contrast."

National Resources

What is sometimes not obvious is that the resources used to support tobacco growers are principally those of the country itself. Company backing for farmers is usually sufficient to ensure that local banks will lend them money. Bankers do not, in general, care to lend funds to small borrowers in high-risk activities like agriculture, particularly when they have little or nothing to offer in the way of security. Thus, tobacco helps them to meet their political commitments to the smaller borrower at the least risk. To quote the EIU report again: "Companies prefer to leave the provision of investment capital to commercial or state banks .... The banks are prepared to extend credit to farmers who wish to grow tobacco in Karnataka only if such farmers are sponsored by a tobacco company ...." In Costa Rica, "Banks' attitudes to tobacco growing are influenced strongly by the backing which farmers still receive from the companies."

The support involved is substantial. In Karnataka, the 300 million rupees (approximately US$37.5 million) ad-

Costa Rica. Costs and Income From Tobacco,[*] Rice and Sorghum Under Varying Constraints[1][†]

Limit	Crop	Labor Costs	Other Costs	Total Costs	Income	Profit	Area (ha)[**]
Land (1 ha)	Tobacco	6,180	9,390	15,570	17,845	2,275[††]	1
	Rice	1,370	2,140	3,510	3,960	450	1
	Sorghum	1,670	1,000	2,670	3,250	580	1
Labor ₡6,180	Tobacco	6,180	9,390	15,570	17,845	2,275[††]	1
	Rice	6,180	9,653	15,833	17,863	2,030	4.5
	Sorghum	6,180	3,701	9,881	12,027	2,146	3.7
Cash ₡15,570	Tobacco	6,180	9,390	15,570	17,845	2,275	1
	Rice	6,077	9,493	15,570	17,566	1,996	4.4
	Sorghum	9,739	5,831	15,570	18,952	3,382[††]	5.8

[*] Data refer to burley tobacco; flue-cured costs are higher.
[†] Monetary unit: 1 ¢ (colon) = US $43.35 (free float).
[**] Average farm size in the sample area is 25 ha excluding plantations of the United Fruit Company.
[††] Most profitable crop.

vanced to a relative handful of farmers (less than 8,000) in 1978 represented a full 15% of state agricultural credit in that state.[1] The amount involved is far greater in Brazil where seasonal credit alone (not including finance for barn building, for instance) came to approximately US$150 million, or 875 million cruzeiros in 1979.

The picture is the same in technical support. In Kenya, 190 BAT extension workers support 8,000 farmers, one to 46 farmers.[4] An estimated 2,000 technicians support the 75,000 small tobacco farmers in Brazil's Rio Grande de Sul.[1] Even if the task of the juniors among them is merely to help farmers fill in the application forms for Banco do Brazil loans, the ratio of less than 1 to 400 is remarkable. The ratio in a pioneer area like Parrita is even more dramatic, with four technicians for fewer than 80 farmers.

The first question, then, that needs to be posed in the developing tobacco-growing countries is not "How can alternative crops be encouraged?" but "Why is tobacco so favored?" and "What would be the effect of a redeployment of the resources used to promote tobacco?" In a Third World country with no shortage of capital, no shortage of skilled agricultural extension workers, and adequate price support and marketing arrangements for other crops, redeployment would make little difference. But such countries are few and far between.

What this means for smoking control will be familiar to those who follow the activities of the World Health Organization (WHO) and the exhortations of its director general. International action is helpful but it is national action that is crucial. The WHO may have been successful in persuading the Food and Agriculture Organization (FAO) and the World Bank to give less support to tobacco production, but this support was minimal from the start. Tobacco production is expanded by tobacco companies—and they use national resources to do the job. So the question must now be asked in each country: "How much government support, how much national investment is going to tobacco, directly or indirectly, and why?" If agricultural banks, agricultural schools, and agriculture ministries were to stop using national resources to support tobacco, the efficiency of the corporate support system would be reduced and alternative crops would benefit from their redeployment and hence become more attractive.

And there are alternative crops. The tobacco journals document their variety—in Korea, it is red peppers,[5] in Thailand, peanuts and and mung beans,[5] in Syria, vegetables,[5] in Brazil soya beans, and in Costa Rica, sorghum and rice.[11] What these alternatives usually lack is the consistent technical, financial, and market support that tobacco enjoys.

MULTINATIONALS OR MONOPOLIES?

The best-developed support systems for the Third World tobacco farmer are those of the major international tobacco companies. What would happen if these multinationals were to be excluded? The question is not an academic one—there is ample precedent for the control of tobacco production and marketing by state monopolies rather than by private industry, a practice commendable in that it makes more visible the basic fiscal function of tobacco. Nor does there appear to be any stigma attached to this kind of state control which is practiced in such unashamedly capitalist countries as Japan, Italy, France, Spain, Korea, and Taiwan.

It may be that there are countries in which this choice has

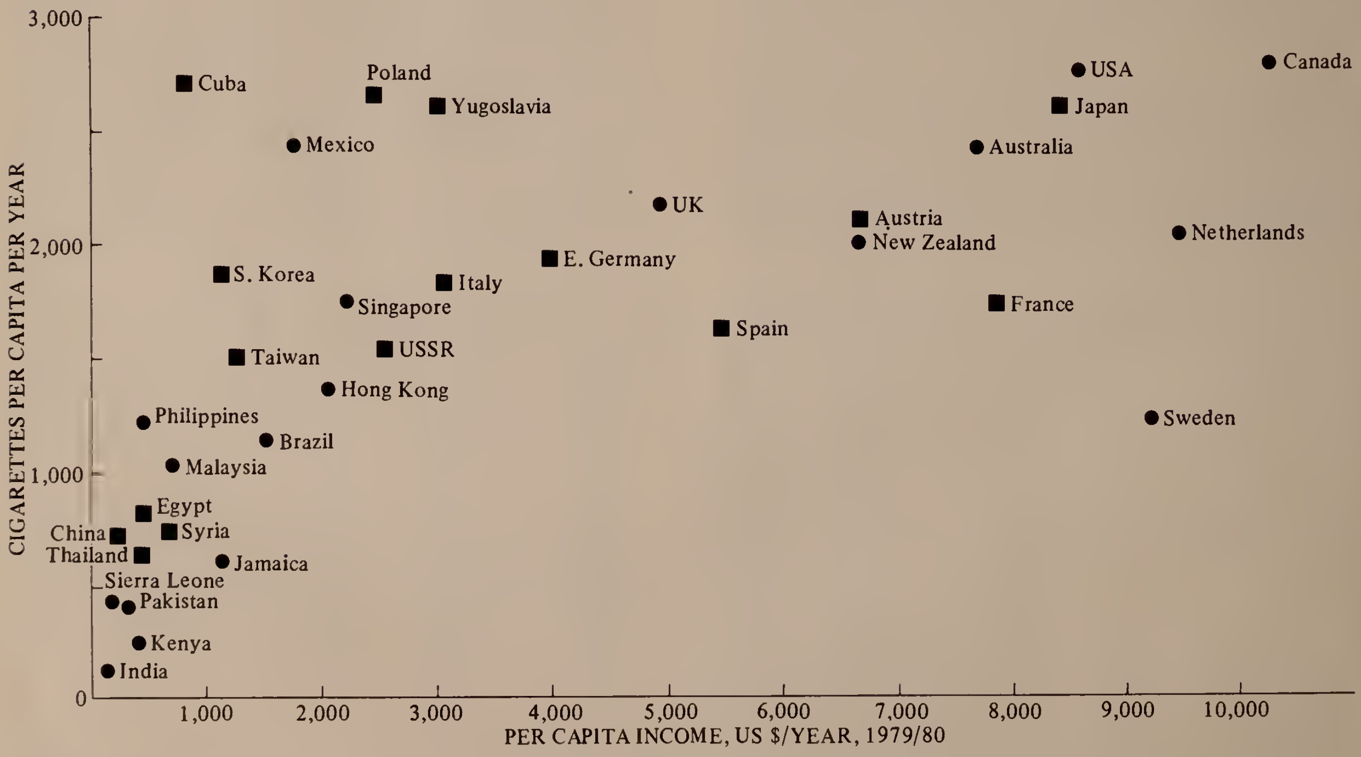

Figure. Cigarette consumption *v* national income; monopolies *v* private industry. ●: private industry; ■ monopoly/state company.

not yet been made or in which it will be raised; therefore, it would be useful to look briefly at the implications. Corporate propaganda, backed by empirical evidence, suggests that without the technical and organizational support of one of the major companies, tobacco growing will invariably be less efficient. This is likely since tobacco would then be treated more like any other crop. There is also strong evidence that the multinationals, the major international tobacco users, tend not to buy from countries whose cigarette markets are closed to them by national monopolies and hence export prospects are penalized.

The inefficiency of the enterprise may be a positive disadvantage, however, when it comes to smoking control. The private tobacco companies aim to maximize their income and profits. They do this essentially by selling as many cigarettes as possible at whatever profit margin they succeed in negotiating with the government. The objective of monopolies, on the other hand, is to provide revenue for the state. Theoretically, they can maximize this revenue by raising prices until consumption falls so fast that their total income and return are reduced. In practice, however, it appears that the monopolies are not notably efficient in this regard. The Japanese Tobacco and Salt Monopoly recently raised prices by over 10% which cut consumption by only 3%, suggesting that the Monopoly could be earning far more for the state than it is.[6] In Egypt, cigarette prices are fixed and, because of shortages, street prices are 30% higher than the legal price—a margin that could be earned by the state rather than by blackmarket speculators.[7] And, in general, there is no clear difference between per capita consumption in countries with monopolies and in those where the cigarette industry is in private hands. Indeed, in a number of countries where there are monopolies, consumption is higher than would be predicted in terms of national income—the socialist countries are particularly depressing in this regard (see Figure).[7] (Caution should be used in interpreting these figures since there are complicating factors that make such comparisons difficult. Countries with monopolies may be those where income inequalities are less acute, with higher consumer purchasing power as a consequence; where there are historical reasons for high consumption; or where other consumer goods are in short supply.)

On the basis of this evidence, only if tobacco monopolies can be relied on to maximize revenue for the state by increasing prices should their establishment be encouraged by smoking control advocates, although from the perspective of tobacco production they are less likely to lure farmers from other crops and also less likely to win the export markets that might encourage domestic tobacco production and use in parallel.

THE HAZARDS OF "SAFE" SMOKING TECHNOLOGIES

The third issue that raises important questions about tobacco in developing countries is that of the new technologies being introduced in the industry. There is considerable, if understandable, confusion about the techniques used to produce the "low-tar" cigarettes that the rich world-tobacco industry has been introducing in response to the health criticisms made against its products. These techniques may have a very important bearing on both tobacco growing and cigarette manufacturing. Within the new technologies lie the seeds of an expensive continued dependence of Third World countries on the multinationals for their cigarette technology and of a serious loss of competitiveness for Third World tobacco exporters.

To understand this, it is first necessary to appreciate that a "low-tar" cigarette does not necessarily contain more or less "tars." Rather, it is a cigarette which, when smoked at the rate, say, of one standard puff per minute, yields less particulate matter in the "inhaled" smoke. Imperial Tobacco's then research director, Dr Herbert Bentley, explained some years ago one simple way of making a low-tar cigarette: "If you're not worried about nicotine and if you assume the smoker does not change his smoking habit, one way is to make the cigarette burn faster. To do this, you use more porous paper; the rate of burn is faster, there are fewer puffs." Tar yield can also be reduced by ventilating the filter that dilutes the smoke taken in by each fixed volume puff of the smoking machine. Filters, too, can directly reduce the yield of particulate matter virtually to zero.[8]

One problem faced by the industry in designing a consumer-acceptable product is that these techniques tended to reduce the nicotine delivery and dilute the flavor to an unacceptable extent. A more far-reaching approach is to extract from the tobacco itself some of the substances that are precursors of undesirable particulate matter. One approach to this is to reduce the cured tobacco leaf to a pulp and reconstitute it as a paper, a process long used to salvage waste tobacco within the industry. The tar yields of reconstituted tobacco sheet are usually substantially lower than those of the original leaf. Further, once the tobacco is in a slurry, other components can be removed (particular focus has been on nitrates, precursors of noxious products like acetonitrile), nicotine content can be adjusted up or down, and flavor components removed or reinforced. Recent reviews of industry practice suggest that all of these methods are already in use to a greater or lesser extent.[9]

NEW TECHNOLOGY ON THE FARM

The last-mentioned technique dovetails with new farming methods being developed in the United States. These are intended to enable the US tobacco industry to continue to compete with low-wage Third World competitors in export markets—the price of tobacco on the world markets varies remarkably, but US leaf is consistently and disproportionately more expensive than the products of its competitors. One commentator recently quoted the US average price for flue-cured tobacco at $1.66 per pound compared with $1.12 in Zimbabwe, 91¢ in Malawi, 79¢ in Thailand, 48¢ in India, and 45¢ in Brazil.[10] The major obstacle to cost cutting in tobacco growing has been the labor-intensive business of harvesting and curing which involves a series of hand operations not easily mechanized on small farms. In response, easily packed bulk barns that can receive machine-harvested leaf have been introduced. In a more far-reaching effort, the US Department of Agriculture and the tobacco companies have been investigating prospects for a mechanical harvesting and curing system that would further simplify the process; the machine-harvested tobacco leaf is reduced to a slurry in which the fermentation reactions of curing take place more efficiently than in an expensively heated and ventilated barn. The slurry is then reconstituted. By enabling the tobacco to be produced on an entirely mechanized basis, the competitive position of American farmers would be transformed—at the expense of Third World exporters.[3,8,11]

The technique of homogenized leaf curing (as it is known) has an added public relations boon for the industry in that it allows undesirable components to be subtracted at an early stage; among these are leaf proteins. The result has been optimistic claims that tobacco may soon become a major source of protein. Even the FAO, which should know better, has suggested that it is possible that "tobacco leaf may in time become one of the world's principal sources of protein for human consumption and livestock feed."[12] In fact, there are other, more productive plants from which to extract leaf protein, and, even if all the flue-cured tobacco produced worldwide were to be so processed, protein yield per year would only be of the order of 500,000 tons—insignificant in food terms when compared with the production of oilseeds which in the 1970s was already 55,000,000 tons of protein equivalent.[13]

FAO strays farther from the track when it recommends that member countries might choose to produce mild tobacco leaves for the manufacture of less hazardous products. The trend seems to be back to intrinsically higher tar and nicotine, more "flavored" tobacco, which presumably provides a better processing starting point, rather than the mild, low-nicotine leaves that were briefly the vogue in the mid-1970s.[1,9]

In India, export buyer preference apparently switched rapidly from "flavored" strong tobaccos to mild-leaf and then back again[9]; in Brazil, the switch was from mild "filler" leaf to higher nicotine "flavored" leaf.[1]

The panorama must be depressing for Third World countries. If they follow the trend to low-tar cigarettes, they will require the complex new technology and carefully quality-controlled raw materials. This will mean a continued dependence on the multinational cigarette companies and will raise the foreign exchange cost of domestic smoking. The export market for tobacco will become less attractive when quality becomes less important as its control moves from unpredictable fields to the factory and farm prices fall. The introduction of a new technology is a political decision and the tobacco companies have shown themselves to be expert political operators. Thus, it would be rash to predict that the full burden will fall immediately on the developing countries. The industry will time the introduction of the new technologies to minimize the impact and also to avoid upsetting the farm lobbies in their home countries, particularly in the United States where the smaller farmers will also be adversely affected. The trends are clear, however, and they are not in the Third World's favor.

THE BROADER CONTEXT

The smoking-control advocates can thus challenge the apparent attractions of tobacco growing on a number of fronts, whether on the questionable future for tobacco exports, or the cost of the support that makes tobacco appear such an attractive crop, and the future dependence on multinationals for tobacco-manufacturing technology. It would be wrong to suggest, though, that tobacco does not remain a viable crop, particularly for small-scale peasant farmers who invest principally their own labor in its production. It would also be wrong to ignore the transfer of resources implied in tobacco growing and manufacturing from the better-off strata of society, who consume it, to the poorer groups either directly through the sale of tobacco or indirectly through taxation.

Thus, the focus on cutting the demand for tobacco must remain paramount. While there is still a demand for tobacco, it will continue to be grown. This article will draw, from an understanding of the production of tobacco and tobacco products, some lessons for those who seek to reduce the demand for them.

On this front, the first point to be made is that cigarette manufacturing is an expensive way to collect taxes. The cost of establishing a tobacco-processing plant and cigarette factory is high, and in the case of most Third World countries, it is paid mainly in foreign currency. Egypt, for example, is budgeting over $100 million to build a cigarette factory, which will then enable the state-owned Eastern Tobacco Company to meet projected consumption increases of 30 billion cigarettes per year by 1990. The project has been delayed because of cash shortages—the government was hoping to use some of the $300 million promised by the United States for food-industry projects as part of the Camp David peace agreement and is also exploring a deal with South African-based Rothmans to set up a joint venture.[7] In Kenya, $20 million is to be spent to modernize BAT's cigarette factory and upgrade its leaf tobacco plant.[5] In Nigeria, BAT subsidiary Nigerian Tobacco Company is to spend $15 million on a green-leaf processing factory alone.[9] Thailand, which in 1978 spent 720 million baht (about $40 million) to build a big new factory with a capacity of 24 billion cigarettes a year (doubling the Thailand Tobacco Monopoly's capacity) is now faced with the need to build yet another to meet ever-increasing demand.[14]

All the countries mentioned currently face severe economic problems, with investments in many sectors held up for lack of foreign exchange. One commentator recently put the prospects for the 1980s as follows: "For the small, low-income countries, there is no choice but to cut. The options are nationally planned cuts, externally imposed cuts, and the random cuts of unmanaged economic disintegration."[15]

In the face of these harsh realities, the only reason that the tobacco industry receives investment funds is its importance as a tax collector. But governments can maintain or increase their revenue without raising cigarette consumption (by tax rises) and thus avoid production investment. They need to be helped to make cigarette price rises respectable—a health promotion exercise rather than revenue raising. The practice of maintaining low cigarette prices as part of anti-inflation price controls—as in Egypt for instance—must be challenged. More fundamentally, it may be possible to use the present financial crisis to switch tax collection away from tobacco and alcohol to sources that do not require expensive investments and that do not pose hazards to health. (Alcohol must be included here, for its fiscal function is the same as that of tobacco and its health and economic impact are far more immediate.)

CONCLUSION

To look only at tobacco growing is to see only one side of the picture. There is a need to find alternative sources of revenue to cigarettes as well as alternative crops to tobacco. When both are identified, the smoking control advocates will have a case to present that no government can ignore, particularly not a developing country government facing the economic rigors of the 1980s.

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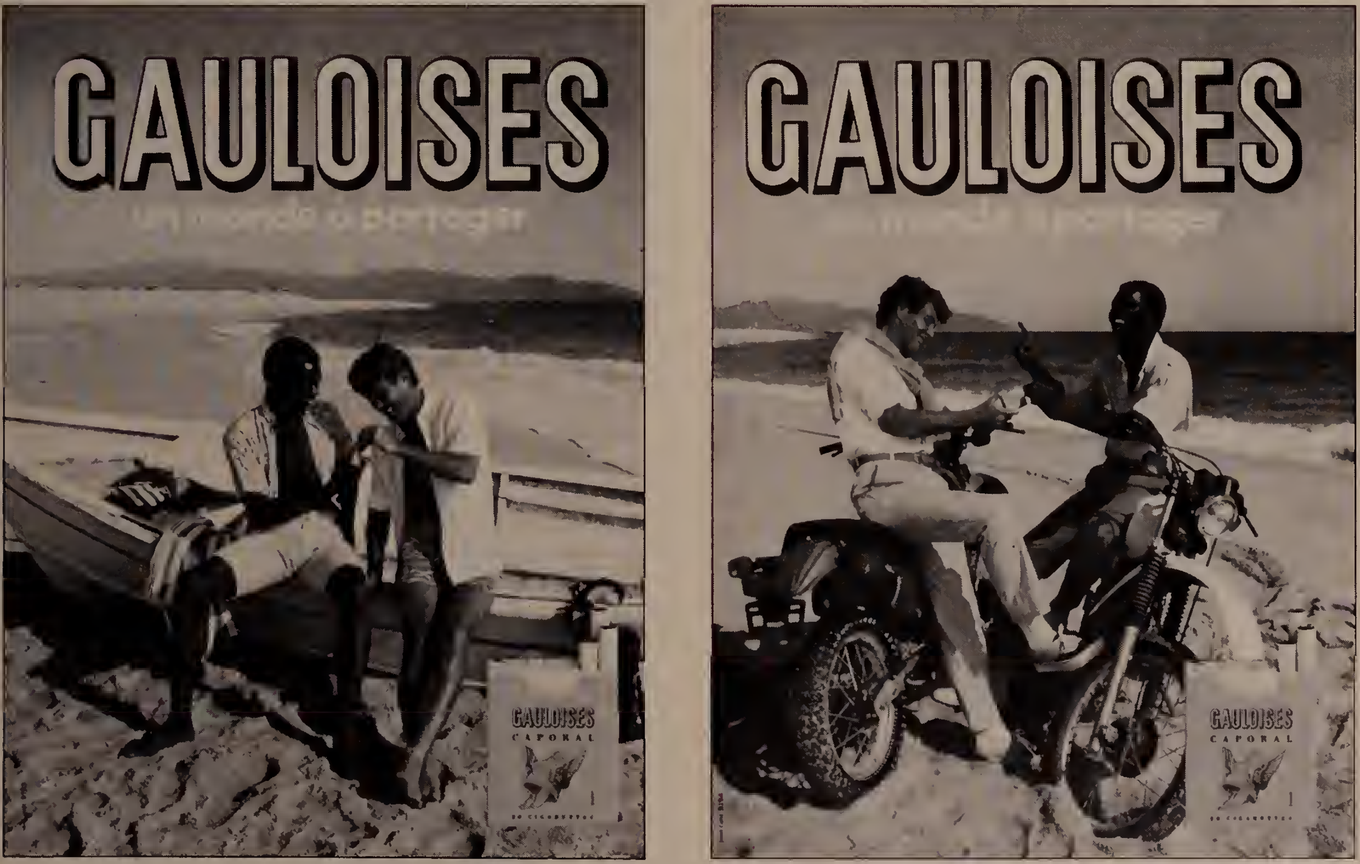

"A world to share" is the theme of one cigarette advertising campaign in the magazine *Jeune Afrique*. Africans are becoming a prime target of American, British, French, and South African cigarette companies.

The environmental impact of tobacco production in developing countries

JOHN MADELEY

Most people believe tobacco kills because use of it can result in cancers, heart disease, and emphysema. But there is a far less well-known way in which tobacco is a major global killer: to grow tobacco is to destroy the trees—and land. Tobacco curing, the process of making it fit for cigarette production, requires an enormous amount of wood. The unheralded scandal of the tobacco industry is the damage to land in developing nations. The United States Global Report 2000 (Report to the President, London, Penguin Books, 1982) identifies deforestation as the most serious environmental problem now facing the Third World.

Just how much damage is tobacco production doing? Almost 100 developing countries have become involved in growing tobacco, most of which is grown by peasant farmers on small farms. Typically a farmer will grow tobacco on half a hectare ([ha] 1 ha = 2.47 acres) of a four-hectare farm. Worldwide production of tobacco in 1981 was 5.6 million tons. Curing is done in different ways, the most common of which are flue, burley (open air), and oriental sun dried. In 1981, according to the Commonwealth Secretariat, the Worldwide breakdown of tobacco curing was

Flue cured	2.81 million tons
Burley	0.63 million tons
Oriental sun dried	0.83 million tons
Other types	1.39 million tons

About half the curing was done in flues or barns. In this process, tobacco leaf is placed in the barns and slowly dried by burning wood. In a few countries, coal is used, but around 2.5 million tons of tobacco is flue-cured each year with wood, a large volume of which is needed to cure comparatively small amounts of tobacco. Peasant farmers use between two to three ha of trees to cure one ton of tobacco. In Tanzania, as in most parts of Africa, the curing of tobacco is done by farmers on their own premises, each with his own curing barn, each having to find his own wood.

Other tobacco-producing countries seem likely to have much the same requirements as Tanzania for the amount of wood needed in the curing process. Tobacco manufacturers do claim to be introducing the more efficient curing barns that need considerably less wood. But even an estimate favorable to the tobacco industry would still mean that 2.5 million ha of trees have to be axed each year to cure 2.5 million tons of tobacco. According to the Global 2000 report, between 18 and 20 million ha of trees are being axed each year for all purposes. Maybe one out of every eight trees cut down is used for curing tobacco. In countries such as Kenya, which lies near the Equator, much of the land has lost its protection due to deforestation, and food production is threatened—all because the economic incentives provided by the tobacco companies make tobacco an irresistibly profitable commodity. Where tobacco is grown in hilly areas such as the Himalayas, it can cause severe soil erosion. In other circumstances, it can cause havoc, as in Sri Lanka. There the combination of treeless hillsides and heavy rains portends disaster for a series of dams currently being built, which are in danger of being filled with silt. Another problem of denuding the land is the resultant change in climate.

Tobacco growing also poses problems for the rural dweller who does not grow tobacco but who needs trees for cooking fuel. If tobacco farmers are axing trees for their tobacco, then those who do not grow tobacco have to walk farther each day in search of wood fuel, thereby adversely affecting production time and income.

The very growing of tobacco has a direct effect on health, since a great deal of insecticide has to be used in the early stages of tobacco growth. An internal document of a British tobacco company that operates in Africa reveals that farmers are employed on contract and are supplied with different pesticides. According to the accompanying instructions, in the month before planting and in the three months after planting, no fewer than 16 applications of insecticide have to be made. It would take a Western farmer with a degree in agriculture to be able to follow these instructions, which an African farmer would find difficult to understand. One of the insecticides on the list is Aldrin (Shell Oil Company), which is banned or restricted in most Western countries. In the Third World, most farmers can not afford protective clothing. Precautions on most chemicals generally inform the user of the need to avoid pouring them into rivers and streams, to wash with soap and water after use, and to consult a physician immediately in the event of symptoms of poisoning. Yet chemical runoff into streams does occur; soap is often unavailable, and in rural areas access to medical care may not exist. It is plainly preferable that tobacco not be grown at all, but if it continues to be grown then tobacco companies must be compelled to promote other ways of curing it. In some countries, tobacco leaf is collected from the small farmers and then cured centrally, which is far less demanding in the use of trees. Also, alternative methods such as solar units are available to cure tobacco. On the other hand, it is difficult to think of a way around the risks posed by pesticides. Maybe this problem is nature's way of telling us that tobacco is a thoroughly antisocial crop.

Farmers need to be encouraged to substitute other crops for tobacco. The World Health Organization (WHO) has identified a number of alternatives: cereals, legumes, most vegetables, sugarcane, bananas, coconut, pineapple, and cotton. The telling question is whether or not the governments of tobacco-producing countries are prepared to help

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Based on a presentation delivered at the Fifth World Conference on Smoking and Health, Winnipeg, Canada, July 12, 1983.

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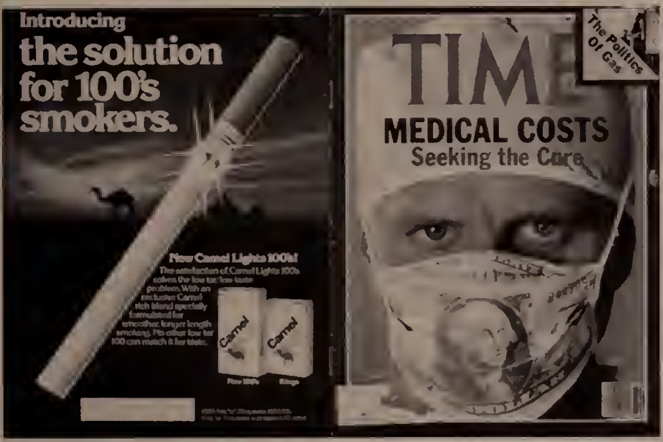
farmers switch from tobacco to other crops. The WHO ought to have the backing of the United Nations Food and Agricultural Organization (FAO) in this task. One of the mandates of the FAO is "to secure improvements in the efficiency of the production and distribution of all food and agricultural products from farms, forests and fisheries, and to better the conditions of country dwellers" (Basic Facts About the UN, New York, 1975).

A recent FAO document, *The Struggle for Food Security* (Rome 1979), stated

> The world's forests play an important part in the protection of agriculture and their progressive destruction poses a serious hazard to future production. The forest is a whole ecosystem: it protects soil from erosion and produces food itself.

Those in the FAO who defend the tobacco industry may be seeing the issue only in the short term. Since the FAO is interested in helping farmers in countries with increasing their food production on a sustained basis, it seems senseless for it to support tobacco production. More research is needed on the subject of deforestation for tobacco production in developing countries. But it is clear that, over and above the devastating health consequences, the environmental costs of tobacco production are high. An enormous amount of destruction is taking place, and what is it all for?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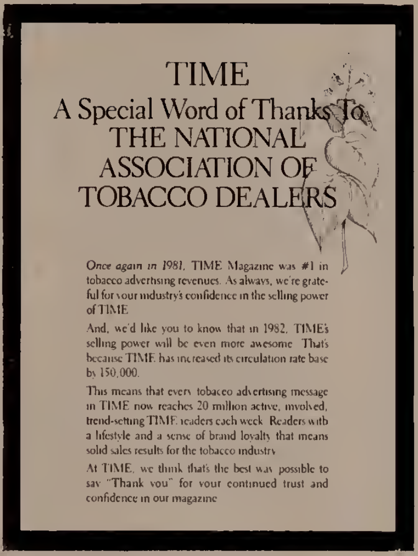

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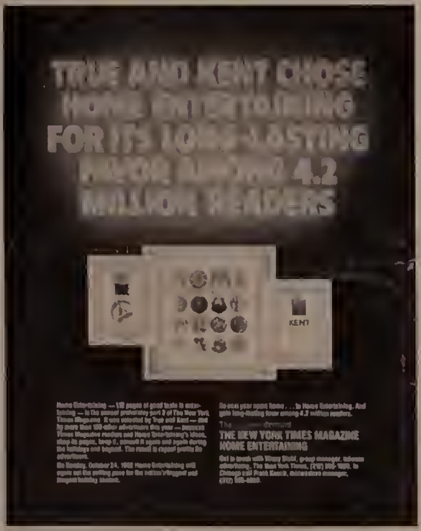
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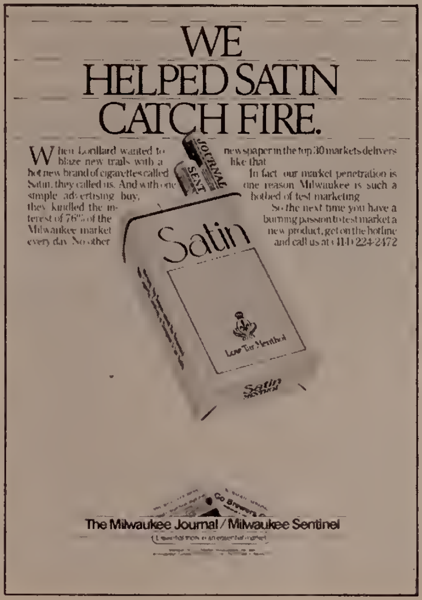

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Aspects of smoking in developing countries in Africa

D. FEMI-PEARSE, MD

Tobacco was introduced into Egypt and Asia by the Turks in the 14th century. Cultivation of tobacco in East, West, and South Africa is attributable to the explorers of the 16th century who on graduating from the School of Prince Henry the Navigator sailed to all parts of the world. The explorer Crowley may have been the first to report on smoking in Africa. Calling at Sierra Leone on his way to the West Indies in 1607 he saw "tobacco growing in small patches and natives smoking it."[1]

Still, tobacco growing was not a major crop until recent years. In Nigeria in 1934 just 86 acres of land were cultivated for tobacco. But in the same year a pilot cigarette factory was established, and a second one was built in 1937. In 1982 the first green-leaf thresher was installed, capable of handling 6,000 kg of green leaf per hour. In peak season it employs 480 persons on two shifts.

Today cigarettes reach developing countries by importation (eg, Ethiopia and Sudan) or by local cultivation of tobacco and manufacture of cigarettes (eg, Zimbabwe, Nigeria).

AGRICULTURE

The cultivation of tobacco in Africa has been encouraged in recent years by multinational companies, especially British American Tobacco and Rothmans, thus avoiding import duty on raw materials and conservation of scarce foreign exchange.

In Nigeria 60,000 farmers now grow tobacco on 120,000 acres. The three major deleterious effects of cultivating tobacco are:

1. Competition with cultivation of staple food crops, such as rice, millet, cassava, and guinea corn.
2. Displacement of necessary cash crops, such as cotton.
3. Loss of timber through tree felling and bush fires due to ignited cigarette stubs and promotion of erosion and sahelian migration in areas with already sparse vegetation.

In the Sokoto region of Nigeria, tobacco thrives in the flood plains where rice would normally be expected to grow. Because tobacco provides ready cash, rice is a second choice for cultivation. The net result of such displacement of staple food crops is that rice is now imported into Nigeria. Any development economist would rather cultivate rice than tobacco. Forest reserve has been lost from clearing bush to promote cultivation of tobacco and using wood fuel in flue-curing of tobacco. The ecologic consequences in areas bordering on the desert are disastrous.

Yet the spinoffs to the grower of tobacco cannot be dismissed. Most obvious is that cash returns for cultivating tobacco are better than for food crops. In the Sokoto area of Nigeria, crop value in 1977 to 1979 was N4, 270,682 or US$6,406,023—providing an annual income per head of N153 or US$230. If other crops are also cultivated, the farmer can earn more income. Tobacco farmers thus have a generally higher status than do food growers. Because tobacco growers are relatively prosperous, they tend to stay on during periods of drought whereas other food growers tend to migrate to the urban areas.

The acquisition of modern skills is associated with growing tobacco. The multinational tobacco companies take pains to teach local farmers modern methods of land preparation, ploughing, harrowing, germination of seeds, planting, and usage of fertilizer. Scholarships are provided as incentives for the children of tobacco growers. The traditional business sector is exposed to new marketing strategies and international business practices. Tobacco companies provide long-term and short-term credits for development of farms.

Despite the apparent economic improvement generated by tobacco companies, the subservient role of women, particularly in the farming villages of the Third World, has remained unchanged. Women are still the "beasts of burden" through whom the tobacco companies and male farmers become prosperous.

It is obvious that in the hungry countries of the Third World, governments must employ the strategies of tobacco companies to sustain the growth of food crops—and do much more than they in preparation of land, ploughing, distribution of germinated seeds and fertilizer, and provision of stable economic prices for food crops through cooperative societies. Credit facilities should also be available to bona fide farmers.

The fight against cultivation of tobacco can be won not by rhetoric, but by planned action. Recently, tobacco companies have introduced programs such as block farms among tobacco growers. Farmers are now encouraged to grow not only tobacco but other crops, especially those related to food, in small land holdings. Several acres of such land are demarcated for growing a food crop such as cassava. In 1978 the Nigerian Tobacco Company set up a block farm for the cultivation of a new high-yielding and disease-resistant cassava obtained through the International Institute of Tropical Agriculture in Ibadan. Farmers were encouraged to plant the cassava in rotation with their tobacco. This cassava matures in 11 to 12 months instead of the normal 15 to 18 months and yields up to 25 to 30 tons of tubers per hectare (2.47 acres), compared with the traditional 5 to 7 tons. The *Annual Report* for 1979 of the Nigerian Tobacco Company stated:

> When the harvest was in, net earnings on this block farm averaged N1000 or US$1500 per hectare from tobacco and N1000 or US$1500 per hectare for cassava. Since each farmer has 3 hectares—one each for tobacco and cassava and one for rota-

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Based on a presentation delivered at the Fifth World Conference on Smoking and Health, Winnipeg, Canada, July 11, 1983.

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> tion—a farmer and his family were able to net N2,000 or US$3,000 per annum, after providing food for themselves from their cassava . . . . With farmers' earnings reaching such dimensions, the drift from rural to urban areas may not only be halted eventually, but may even be reversed.

In the past five years the tobacco industry has begun active reforestation programs since 3.5% of wood-fuel consumption is devoted to flue-curing of tobacco. It is hoped that reforestation will prevent erosion and desert encroachment, and provide wood pulp for the paper industry.

ECONOMICS

Governments in the Third World have been slow to arrest the tobacco-smoking habit because of large government revenues derivable from sales and manufacture of cigarettes. In Nigeria, revenue of about US$25 million was collected in 1965. The figures for 1980 are quoted from the Nigerian Tobacco Company's *Annual Report*:

> During the Company's financial year ended 30th September 1980, out of a gross annual revenue of N95 million (or US$143 million) about N34.36 million or US$51.5 million was due to government in cigarette excise, import duties on materials and in company tax. During the same period, N5.0 million (US$7.5 million) (5.3%) is being distributed to stockholders, with N2.8 million (US$4.2 million) (2.9%) retained in the business.

The consumption of cigarettes is underestimated in government or commercial statistics because smuggling accounts for 25% of total cigarette consumption, and in Nigeria loss to government in revenue is about N40 million or US$60 million.

When the income from tobacco (excise duty, import duty, profit tax, dividend tax) is totalled against the expenditure on importation of food crops (eg, rice) displaced by tobacco growing and costs of treating cigarette-induced diseases, promotion of tobacco sales ceases to be profitable.

Although adults are the main consumers of tobacco—at least 41% of the men in Lagos, Nigeria smoke—smoking nevertheless begins between the ages of 10 and 17 years.[2] A 1973 survey in Lagos, Nigeria, found that 17.5% of the boys and 2.7% of the girls were regularly smoking, figures which have surely increased. Smoking by children assumes enormous importance with the realization that the risk of lung cancer is greater among those who start the habit early.

It may be argued that students smoke because of ignorance of the dangers of smoking. Senah,[3] analyzing data from Ghana, reported that only 8.5% of 12,516 survey respondents had knowledge of the product as a drug of dependence. Perhaps greater awareness of the dangers will reduce the number of regular smokers. In this study only 16.3% of 705 school teachers indicated tobacco as a drug of dependence in a list that included alcoholic beverages, marijuana, dexamphetamine, black coffee, opium, hashish, heroin, and cola. The score for marijuana was highest at 28.4%. Senah asked teachers to name two drugs which they used regularly; 140 out 450 (31.1%) admitted to being cigarette smokers. Among 331 parents only 12.1% were aware of tobacco as a drug of dependence and addiction. Forty percent (99) of 233 parents were regular smokers.

Another study showed that in Nigeria parental objection to school children smoking is quite high (75% of fathers and 95% of mothers for boys and 85% of fathers and 97% of mothers for girls).[2] Most parents of medical students also objected. Why, then, is there defiance? Although the number of experimental smokers may not diminish appreciably it may be possible through drug education to teach young people to make the right choices.

In the Dakar study[4] 55% and 28% of school children were offered their first cigarette by friends and parents, respectively. When asked "Why did you start to smoke?" the responses were: To look like an actor or sportsman, 45%; To be like a friend or parent, 18%; For curiosity, 23%.

Cigarette smoking has a strong influence in provoking the usage of other drugs of addiction. Haworth[5] in Zambia found that the smoking of tobacco and cannabis were related: of 15% of males and 37% of females who had never used alcohol or tobacco, only 2% had used cannabis, whereas 35% of those who had smoked tobacco, 13% of those who had taken alcohol, and 55% of those who had used both tobacco and alcohol used cannabis. All the known pathologic consequences of cigarette smoking occurring in Europe and North America are now occurring in the Third World. Yet in most African countries at least one third of practicing physicians smoke, thus reducing their credibility as role models. All nations of the Third World must examine critically the relevance and desirability of imported lifestyles such as cigarette smoking. The material and social costs of the pandemic of cigarette smoking cannot be justified.

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"A RESPONSIBLE TOBACCO INDUSTRY PREVAILS"

We recognized early that ours is a global business and built markets around the world. Our future is particularly bright in developing areas, where income and population are growing.

—from an address by Joseph Cullman III,
Chairman, executive committee, Philip Morris, Inc.,
to the annual meeting of the Tobacco Merchants Association
of the US, Hotel Pierre, New York, NY, May 19, 1983

Smoking or health: the Brazilian option

FERNANDO L. LOKSCHIN, MD, FERNANDO C. BARROS, MD

In Brazil, tobacco plays a key role in both disease and the economy. About 135 billion cigarettes were smoked in the country in 1981,[1] and cigarette-related diseases far outnumber infections as the leading cause of death.[2] At the same time, Brazil is the fourth world producer and the second exporter of tobacco. Two and a half million people (2.1% of the total population) are maintained by tobacco-related activities. Cigarette sales taxes provide 11.6% of the country's total taxes.[1] Involved in a deep economic crisis, the Brazilian government relies on this revenue and has not introduced a single measure to control or counteract the high-pressure marketing of cigarette manufacturers.

In this article we discuss the present influence of tobacco on both the health and economy of the country and also the current policies—or lack of them.

THE DEATH TOLL

Ischemic heart disease is the leading cause of death in Brazil, taking 90,000 lives in 1979.[2] Using the estimates of the World Health Organization,[3] at least 25% of these deaths could be ascribed to smoking.

Surprisingly, for a developing country with a very large young population, cancer rivals infectious diseases as the second largest cause of death. In 1979, there were 60,000 deaths due to cancer (10% of these deaths caused by lung cancer). Accepting the estimate of Doll and Peto[4] that 30% of the cancer deaths are provoked by smoking, we are left with more than 20,000 deaths caused by tobacco. In Brazil, lung cancer is the second highest cause of death from cancer in men, and ranks third in women.[2]

Besides these well-known causes of death, smoking also influences mortality in other ways. For example, smoking is definitely associated with low birth weight,[5] and this is the most important single predictive factor of perinatal and infant mortality. In a study in Pelotas, Southern Brazil, smoking during pregnancy has been found to double the rate of low-birth-weight babies, even when maternal nutrition and family income are controlled (F. C. Barros et al, unpublished data). Smoking is the main etiologic factor responsible for more than 20% of all low-birth-weight babies of the city.

Another effect of tobacco on infant health was signaled by Victora and Blank[6] who showed that in the district of Santa Cruz do Sul, located in the southernmost state, Rio Grande do Sul, the decline in infant mortality rate was 30% less than expected. The Secretary of Health also found that the infant mortality rate was not decreasing at the same pace as the rest of the state. In this district is the large cigarette factory of Souza Cruz (British American Tobacco Co. subsidiary); and 71% of the population of 99,600 inhabitants get their salaries from the tobacco industry, whether from manufacture or from agriculture.[1] It is probable that the bad record on child health was due to the fact that the rural workers gave up subsistence crops in order to grow tobacco.[6]

Another important point is that in low-income populations expenditures for cigarettes often wreak havoc on the family budget, with less money being made available for essential goods. Silveira Lima et al,[7] studying a fringe population of Sao Paulo, found that expenditures for cigarettes ranged from 3.1% to 14.6% (mean 9.8%) of the family income. This was higher than expenditures for transportation (5.8%) and milk (8.3%).

EFFECTS OF SMOKING ON THE ECONOMY

The most important taxpayer in Brazil is the cigarette industry, which contributes 37% to 40% of the total amount collected by the Industrialized Products Taxation.[1] The second most important payer is the car industry, with alcoholic beverages ranking third.[1] During the first five months of 1983 the government collected more than $500 million from the tax on cigarette sales (Banco de Brazil, unpublished data). Of the consumer price, 75.2% goes to the government; this is the highest taxation in the world, twice that found in the United States.[1]

As a result of the high tax rate and the enormous number of cigarettes sold every day (almost 370 million cigarettes per day in 1981), 11.6% of all the country's revenue comes from the tobacco industry. This percentage is almost twice that found in Britain (6%)[8] and shows the dependence of the government on cigarette manufacturers.

The Brazilian Association of Tobacco Industries (ABIFUMO) has been trying to link cigarette sales to the social development of the country. In a recent publication it is claimed that revenues from smoking taxation are large enough to: (1) pay all expenses of national and public defense during two years, (2) pay all expenses for medical care in the country, including drugs and hospitalization, and (3) pay 40% of all social benefits in the country.[1]

What is not said is how much the country is spending and losing from all disease, disability, and early death provoked by smoking. There are also no data about the ecologic consequences of tobacco growing and its influence on food production.

In spite of paying such large taxes, cigarette companies are far from destitute. Souza Cruz returned BAT in Britain well in excess of $100 million during the ten years 1965 to 1975 on a total external investment of less than $5 million in the last 60 years.[9] In only the first six months of 1983, Souza Cruz declared a net profit of $28 million.[10]

POLICIES OF SMOKING CONTROL

Governments worldwide have traditionally adopted an

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Charm
O importante é ter Charm.

Viver bem não se aprende
da noite para o dia.
du Maurier

Cigarette advertisements in Brazil

Shelton Extra Suave.
SHELTON
outra classe.

ambivalent approach in dealing with the smoking problem, often discouraging individual consumption but stimulating production. In Brazil this dualistic behavior has been not seen: tobacco companies are provided with a huge market free of any constraints. In fact, the country lacks consistent smoking control policies, as the following examples show.

- There are no health warnings in cigarette packets and advertisements. Brazil is almost 20 years late in relation to the pioneer US legislation that was quickly followed by almost all countries in the developed world.[11]
- There is no legislation and also no type of voluntary agreement about advertisements of cigarettes on television, radio, or in magazines. Cigarette manufacturers are the top advertisers in the mass media, and smoking is always connected with success and achievements in sports, business, and love affairs. Sales promotions are totally uncontrolled by any official body.
- Cigarettes are freely sold to teenagers and even to children throughout the country.
- There is no product description on the packets, and the levels of tar and nicotine only recently were released to the press.

- Taxation is the only measure adopted by the government. There is no correlation between taxes and levels of nicotine and tar. Because of this, lower-tar cigarettes are the top-priced ones, available only for the better off. Taxation is usually considered an effective way of reducing smoking, but in Brazil there is a trend to introduce cheaper brands every time the price is increased.
- Cigarettes are seldom banned in public places. Only a handful of municipalities have prohibited smoking in buses or in other public places.

Recently some medical associations have urged the government to take stronger measures, but physicians are still reluctant to speak out. Specific legislation regulating cigarette sales and advertisements is badly needed.

The first task is convincing politicians and other policymakers that aiding and abetting the cigarette companies is, in the long run, bad for the economy.

Medical institutions are in a key position to pressure the government and the tobacco industry. Physicians are expected to provide the population with the necessary health education. Neglecting to act against smoking is a kind of malpractice.

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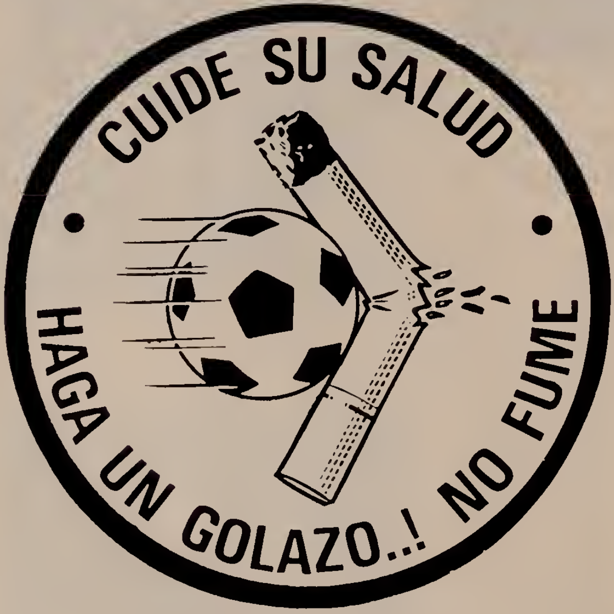
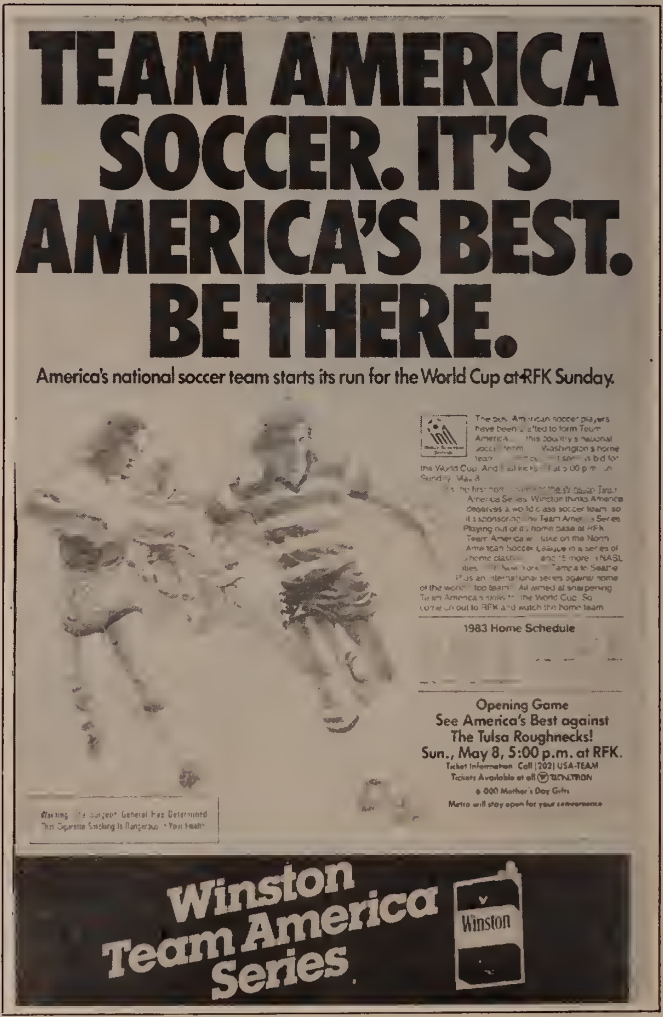

CUIDE SU SALUD
HAGA UN GOLAZO..! NO FUME


TEAM AMERICA SOCCER. IT'S AMERICA'S BEST. BE THERE.

America's national soccer team starts its run for the World Cup at RFK Sunday.

1983 Home Schedule

Opening Game
See America's Best against
The Tulsa Roughnecks!
Sun., May 8, 5:00 p.m. at RFK.
Ticket Information Call (202) USA-TEAM
Metro will stay open for your convenience

Winston Team America Series

Winston

"Score a goal! Don't smoke." In Uruguay, although efforts to curtail smoking and restrict cigarette advertising have barely begun, an increasing number of children and soccer players alike are sporting this logo instead of buying a pack of Winston (RJ Reynolds). Reynolds has become a principal sponsor of the World Cup soccer championships and the sole sponsor of Team America, the US's would-be entry for the World Cup. In 1983 former Secretary of State Henry Kissinger lobbied the World Soccer Federation to hold the next World Cup competition in the United States, but his efforts in behalf of the US interests did not succeed.

Smoking in Malaysia

Promotion and control

SOON KEE TEOH, MB BS

The tobacco industry is unusual in Malaysia since the functions of growing, curing, and manufacturing are performed by separate groups. Because of this division of functions, the farmers are more interested in quantity than in quality.

TOBACCO CULTIVATION

Since its introduction as a cash crop by the Malaysian Tobacco Company (MTC, a subsidiary of British American Tobacco) in 1959, the flue-cured Virginia tobacco has increased steadily in hectarage and production. By 1982 12,000 hectares (ha) (30,000 acres) were cultivated, and it is expected to increase to 15,800 ha in 1985. The output had increased from 1.82 million kg in 1970 to the peak of 9.4 million kg in 1982, worth M$90 million (US $38 million).

Malaysia's population is 14 million. About 62,000 families (120,000 people) are involved in tobacco farming, and the 360 independent curers employ about 25,000 workers. Most of the farmers have small farms, about ½ to 1 acre each, resulting in about US $100 to $140 income per month to each farmer. This is considered higher than that derived from fishing and rice growing.

The Minister for Primary Industries has declared that "higher tobacco prices have raised the socioeconomic standards of people in the rural areas" and the Deputy Agriculture Minister has pointed out that "the success of tobacco growing promises to raise rural living standards of the East Coast States." Tobacco is now the third largest revenue earner for the state of Kelantan. In addition, the two coastal states, Kelantan and Trengganu, have been economically backward with strong opposition political parties. The irony is that these parties are conservative, Muslim parties. In Islam, alcohol is considered "haram" (sinful); tobacco smoking is only "makroh" (discouraged).

TOBACCO MANUFACTURE

There are seven companies manufacturing cigarettes, of which the largest are multinational: Malaysian Tobacco Company, Rothmans, and RJ Reynolds. MTC itself holds 70% of the market and the increase in turnover and profits of MTC reflects closely the rise in consumption of tobacco in the country. The turnover had risen from US $73 million in 1974 to US $274 million in 1982, a rise of 270% over nine years, an average of 30% per year. The profits have also increased consistently, from US $22 million in 1978 to US $42 million in 1982, an increase of 90%. MTC is the 19th largest company in the Malaysian corporate sector.

Rothmans also increased its turnover, from US $116 million in 1979 to US $145 million in 1982 (rise of 24%), and its pretax profits rose from US $8.3 to US $11.3 million (increase of 37%).

The total turnover of all cigarettes sold in 1982 was nearly US $460 million. This figure can be compared with the US $273 million allocated to the Health Ministry for a period of five years. The government derived over US $210 million or 47% of the total turnover in various forms of taxes. This large amount influenced the government in its dealings with the issue of cigarette smoking.

The tobacco manufacturers have direct interest in the tobacco growing as revealed in 1976 when a spokesman for the industry said "to encourage tobacco growing so as to reduce costs from the increasing prices of imported tobacco." The industry, unable to deny the harmful effects of cigarette smoking, is now exploiting the economy of the tobacco farmers to justify their business and to influence the government from taking any action against smoking. They still provide technical expertise, guarantee purchase of tobacco, and provide almost 75% of the fertilizers used.

At present 60% of the tobacco required for cigarette manufacturing is locally produced and is expected to increase to 65% to 70% by 1985.

CIGARETTE ADVERTISING

Cigarettes were the leading form of product advertised in 1981 when US $9 million was spent, the only product to exceed the US $8 million mark. Until cigarette ads were banned from radio and television (both government owned), US $680,000 was spent on radio ads and US $2 to 3 million on TV in 1978. By 1982, 10% of the total revenue to Radio and TV Malaysia (RTM) was from cigarette advertisements. As elsewhere around the world, the tussle surrounding cigarette ads on TV was intriguing. In 1978, the Minister of Information declared that cigarette ads would not be banned since he believed that banning is futile in reducing smoking and would only result in greater unemployment! But by 1979, several restrictions were made at different occasions. First, the ads were not permitted to include any human prop; then they were restricted in number; and, later, ads were not allowed before 9 PM. It was then decided to add the health warning notice which was silent but later was to be voiced over. The frequent changes in rules led to complaints by the manufacturers.

In 1982 all cigarette ads on TV and radio, and in all

Based on a presentation delivered at the Fifth World Conference on Smoking and Health, Winnipeg, Canada, July 12, 1983.

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government publications were prohibited. By then, the new Minister said that cigarette ads formed only 10% of the revenue to RTM and could be replaced by other avenues.

The action had far-reaching implications since both radio and TV are entirely government owned. Nearly half the adults regularly listened to the radio, and there are 2.5 million TV sets (each with an average of four viewers) in a population of over 14 million.

Of course, the cigarette companies continued their promotional campaigns as they said "The ban is definitely making our advertising task difficult—new ways out of this dilemma have to be found." The newspapers offered them a suitable channel with over 50 newspapers in eight languages, and a total of over 4 million newspapers were published in the country (Chinese 1.49 million, Malay 1.47 million, and English 0.83 million); full-page multicolored ads were regularly appearing. Although the warning sign is compulsory, it is small and inconspicuously placed in one corner.

Cigarette companies also camouflaged their advertisements by using brand names to sponsor certain televised events: Benson and Hedges Golf, Football sponsored by Dunhill, or Rothmans Grand Prix. An insidious campaign by MTC in launching their new brand "Heritage" is the holding of an exhibition "Heritage of Gold" at different towns over the last two years, with the logo of "Heritage" and "Benson and Hedges" (packaged in the familiar gold box) displayed over TV. Winston (RJ Reynolds) had a campaign to associate its flying eagle symbol with the sale of prints of the "Eagle for the World Wildlife Fund." In August 1983, "Winston of America" sponsored a world badminton championship (Fig). Live football telecasts were sponsored by Dunhill of London, a cigarette company.

The Annual Malaysian Press Awards are sponsored by the Malaysian Tobacco Company.

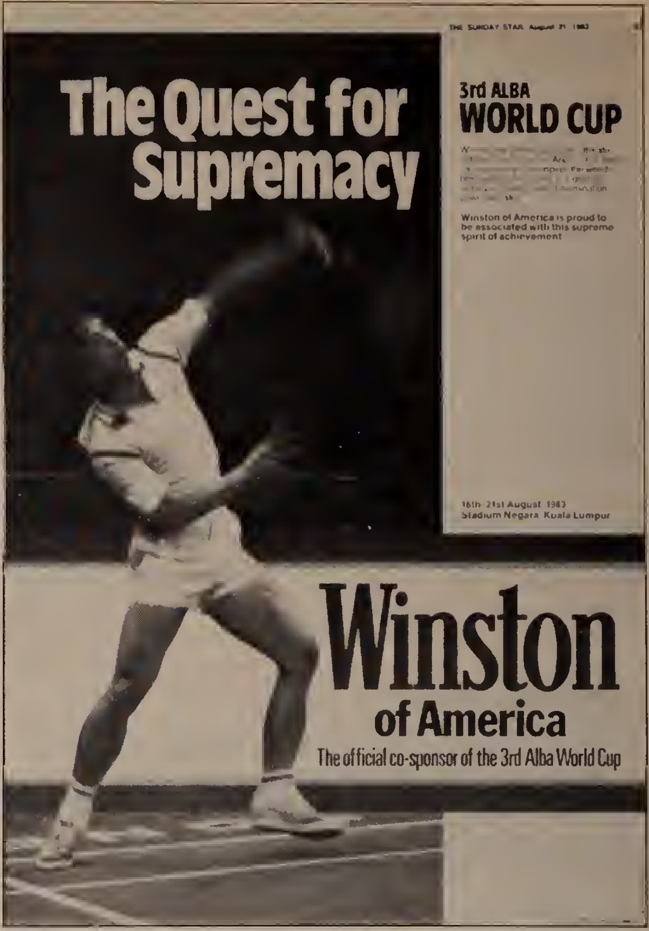

THE SUNDAY STAR August 21 1983
The Quest for Supremacy
3rd ALBA WORLD CUP
Winston of America is proud to be associated with this supreme spirit of achievement
16th-21st August 1983
Stadium Negara Kuala Lumpur
Winston of America
The official co-sponsor of the 3rd Alba World Cup

FIGURE. RJ Reynolds, under the guise of "Winston of America," sponsors championship badminton. "Winning the World Cup is the ultimate achievement in sports," says the ad copy which does not identify the product being advertised as cigarettes, much less warn of smoking's effect on athletic performance.

Cigarette Smoking in Malaysia

The number of cigarette smokers has been increasing by about 5% to 7% over the last 10 years. In 1975, a study by a leading newspaper showed that 1.25 million or 20% of the total adult population smoked. Most of them (91%) were males. Nearly three quarters of them (74%) were in the lower socioeconomic class earning less than US $125 month; 60% of them were Malays, 31% Chinese, and 8% Indians, as compared with the population ratios of 50% Malays, 35% Chinese, and 10% Indian. The average cigarette consumption per adult aged 15 years and above had risen from 1,440 per year in 1965 to over 2,000 per year in 1978, an increase of 44%. In 1977, over 10 billion cigarettes were consumed.

Recent studies of secondary schoolchildren showed that the smoking incidence is about 20%, about half of whom were habitual smokers; about 20% of them had smoked for over three years. As for the reasons, more than half smoked for fun and 30% were influenced by friends; 20% were ignorant of the dangers of smoking. Concern had been shown for student smokers not so much due to the health dangers of cigarettes but due to close association with drug addiction; this was revealed in a study showing that almost all the young drug addicts began their habit through cigarette smoking. The Education Ministry banned smoking on school premises except in the teachers' common room. Students caught smoking could be punished by warning, caning, or even suspension.

Except for elderly villagers, smoking is still uncommon in women. A recent study of women attending an obstetrics clinic showed only 3% were smoking in contrast with 41% of their husbands who smoke.

Action Against Smoking

Prior to 1980, action against smoking in public places in Malaysia was slow and sporadic.

The medical profession was the first to raise the issue. The Malaysian Medical Association (MMA), together with the Ministry of Health, formed a joint Antismoking Committee in 1970. After five years of lobbying against strong opposition, a breakthrough of sorts was achieved. In 1977, the Cabinet approved the proposed legislation that all cigarette packets should include the health warning in the Malay language: "Smoking is hazardous to health." Although the effects of the health warning are debatable, this action is the most definitive sign that the government acknowledges the dangers of smoking, thus making subsequent demands easier to justify.

Progress was slow partly because many of the political leaders were smokers; the Prime Minister in the early '70s even declared that he enjoyed smoking. The Speaker of the Federal Parliament was made Chairman of Rothmans (Malaysia) when he retired. Packets of Rothmans cigarettes were especially prepared and distributed free to all Members of Parliament.

In 1980 the World Health Theme on smoking proved to be a catalyst in focusing attention on the issues of smoking. The Ministry of Health in collaboration with the MMA and consumer groups such as the Consumers Association of Pemany began a campaign featuring local government personalities.

It was also opportune that the new Prime Minister, Dr. M. Mahathir, is a medical doctor and a nonsmoker. New antismoking measures were taken, culminating in a 19-point federal government directive prohibiting government employees from smoking in the offices and at meetings, and restricting cigarette promotion in government media. Unfortunately, few means of enforcement were provided. At the start, "nonsmoking" notices were not even available, and the MMA had to supply posters to many government departments.

Several town councils took action to prohibit advertising in public places, including the federal capital and the state capital of Kelantan, the largest tobacco-growing state. However, there were several loopholes. The federal act covered advertising on roads and in public buildings. Private establishments including restaurants, cinemas, and even stadiums could continue advertising.

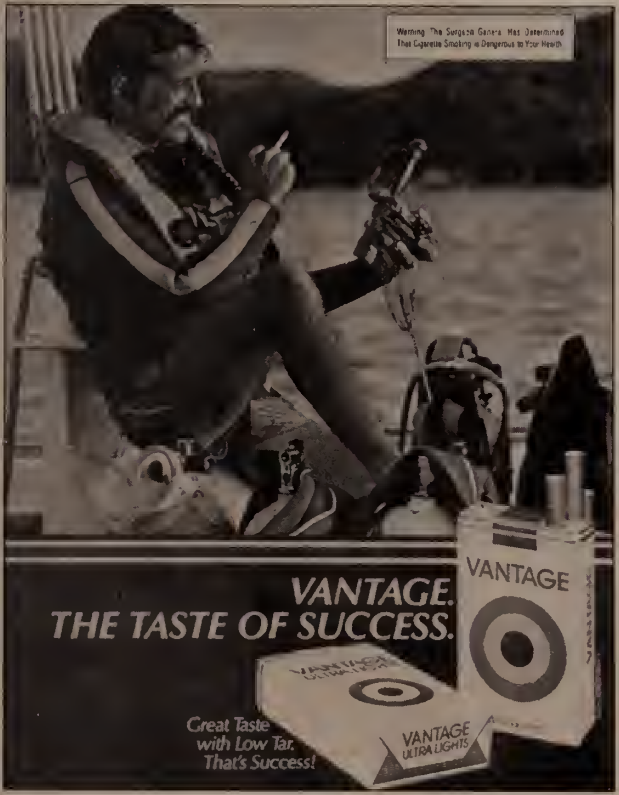
Smoking on public transport became a burning issue, with numerous letters appearing in the press. Although the Road Transport Ordinance of 1959 prohibited smoking by bus drivers and conductors while at work and even prohibits smoking by passengers in buses that have "No smoking" signs, implementation was not effective since it was left to the bus operators to carry it out.

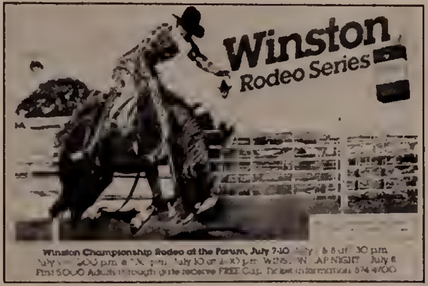
Nonsmoking areas were provided in trains and ferries. The national airline in early 1983 took an unprecedented step of converting the seating to the vertical division on the grounds that smokers complained that they had always to sit at the rear. Protests made by Action on Smoking and Health (ASH) of the MMA were instrumental in persuading Malaysian Airline Systems (MAS) to change this decision to fore-aft division.

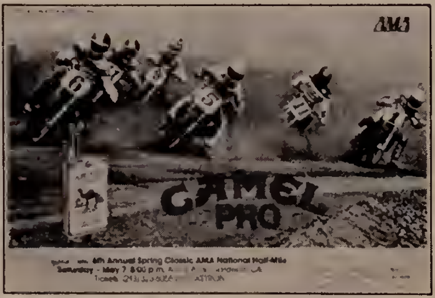
The 1982 budget increase on the excise duties on local tobacco and on the import duties on imported tobacco led to the first significant increase in the price of cigarettes. For many years, the price increase of a packet of 20 cigarettes was lower than the rate of inflation, being only US $.60 in 1980; the increase in duties led to an increase of $.30 per packet. The sudden rise in price did lead to a drop in the sales as admitted by retailers and as evidenced by figures for 1983 declared by MTC. Although the turnover in dollars rose as a result of higher-priced cigarettes, profits dropped and as MTC admitted "fewer cigarettes were sold as a result of the increase in prices."

Forthcoming action will be targeted along the following lines:

1. Banning all cigarette advertisements, or at least plugging the loopholes on cigarette advertising, such as increasing size of the warning sign and preventing pseudo adverts with the use of cigarette brand names on nontobacco products.
2. Stopping all cigarette sponsorship of sports events.
3. Publication of tar, nicotine, and carbon monoxide levels.
4. Stricter implementation of nonsmoking areas in public places.
5. Greater efforts in health education especially in the non-English language media and to youth.


Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health
VANTAGE
VANTAGE.
THE TASTE OF SUCCESS.
Great Taste with Low Tar. That's Success!
VANTAGE ULTRA LIGHTS


Winston
Rodeo Series
Winston Championship Rodeo at the Forum, July 7-10
First 5000 Adults through gate receive FREE Cap.


AMA
CAMEL
PRO
6th Annual Spring Classic AMA National Half-Mile
Saturday - May 7 8:00 p.m.

In the US in 1983 RJ Reynolds has advertised cigarette smoking in association with aerobic activities such as SCUBA diving and ballet, as well as with other risk-taking endeavors (rodeo, drag racing, motocross) nearly as dangerous as smoking. (The "AMA" in the bottom ad stands for American Motorcycle Association.)

India's shame

A war on smallpox but a welcome for cigarettes

Uma Ram Nath

What Price Tobacco?

"Tobacco growers, like cigarette butts, are throwaways," said a 72-year-old farmer, who has been growing the leaf for over 50 years in the state of Andhra Pradesh, one of India's major tobacco growing areas. And it is a lucrative business—that is, for the national exchequer and the industry. The farmers do not do so well. They have been protesting, with bloody and sometimes fatal results, for about three years at the low prices being paid to them for their crop. Although land under tobacco represents only 1% of total cultivated land, it fetches more than 7,500 million rupees (US $1,000 million) in excise duty and 2,000 million rupees (US $300 million) in much prized foreign exchange. Figures for central excise receipts for 1980 to 1981 showed that cigarettes topped the list of 27 commodities while the hand-made bidi (a cheap, rolled leaf cigarette) came 17th, and tea, 24th.

Tobacco is thus a valuable source of revenue in India, which puts the government in the position of seeking ways to profit from cigarette sales.

Meanwhile, the roadside signs tell the whole story, asking you to smoke A-1, Royal Pipers, and Personal Preference. These and other new brands signal a major assult by the lesser cigarette companies on a market dominated by India Tobacco Company Ltd (ITC, the Indian associate of British American Tobacco). ITC has over half the market for over 90 billion cigarettes sold annually.

Advertising is the major weapon; it is the creation of positive perceptions of smoking that reigns supreme in India. The men are rugged and virile, the women elegant and seductive. All of them have what one could naively describe as "class." They are planted in situations the ordinary Indian would shrink from in reality, but aspires to in his dreams.

Health Legislation

What laws have cigarette manufacturers had to observe? The Cigarettes Act of 1975 mandates that a health warning ("Statutory warning: Cigarette smoking is injurious to health") should appear on each packet of cigarettes and on any form of advertising including "visible" representation made by any means of light, sound, smoke, or gas.

Negotiations are under way for the health warning to be printed in 16 different regional languages, rather than just in English and Hindi as they are at this time. The industry claims this would be unmanageable logistically since cigarettes manufactured in one part of the country are not necessarily sold in the same area. What use is a warning printed in English when only a small section of the population is literate? It is a patently false observance of the letter of the law. And cigarettes in India, as in many developing countries, are often sold "by the stick" anyway, so what use is this minimal genuflection to health legislation when most smokers do not even see the packet?

There are regulations governing the placement of advertising signs—these may not be placed near schools, hospitals, and other public institutions. Cigarette advertising does not appear on radio or TV, but it is allowed in the cinema. There is no advertising in newspapers, but magazines carry ads. There is no control over the companies' sponsorship of sports events, cultural jamborees, or beauty contests.

A Cigarette in Every Village

It is really by default that cigarettes are being promoted in India. It is a cynical disregard for the health of the consumer—a trading on the lack of knowledge and informed opinion—that allows cigarettes to be sold and promoted. The biggest markets are in rural areas where 70% of the population lives. The marketing and distribution organization of the cigarette manufacturers is awesome; one can find some kind of cigarette in every village store. Successful promotional gimmicks and giveaways to encourage cigarette sales penetrate the most remote areas, while standard government food distribution sometimes flounders.

For the first time this year I saw a health education film on smoking on Indian television; however, there are hundreds of millions who do not see TV. Moreover, it was made in Germany, and was obviously intended for Western audiences. Its portrayal of the "pleasures" of smoking and its damaging consequences was so far removed from the Indian context that it might as well not have been shown at all. Such is the mismanagement and lack of coordination and planning among various executive arms of the government. India has taken a progressive stance on advertising and promotion of breastmilk substitutes and, included within that, infant foods. Although doubts are still being cast on the efficacy of the restrictions on advertising, the fact is that there is some public debate; informed consumer opinion groups and physicians are involved in setting the record straight. But cigarettes are an extreme threat to health, and there is little public debate or consumer movement in this field.

The government has not shown it is ready to fight the power of the tobacco interests and ban all advertising. But it should be possible to legislate on the nature and contents

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Based on a presentation delivered at the Fifth World Conference on Smoking and Health, Winnipeg, Canada, July 11, 1983.

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of cigarette advertisements and prohibit depiction of people and situations that create a false glamour for the product. If, as the industry claims, they are only seeking to increase brand share, and not promote the idea of smoking, then a reproduction of the brand packet should suffice. One could go a step further and restrict such advertising to point of sale only; that should reduce the appeal and visibility of the product. Second, promotional activities should come under scrutiny—schemes such as sending in tops of cigarette packets to obtain a free pack of cards should be banned. Sponsorship should also be examined. On Indian television brand names of cigarettes loom familiarly in broadcasts of cultural and sporting events, for the advertisers choose their sites with care. The visual element is exceedingly important, given that not all the population is literate and instant messages of this kind are very powerful.

One has to counter the ubiquitousness of the cigarette with other messages about its harmful effects. There have been only the most feeble attempts at health education. Four years ago I saw the rough drafts for a series of health education posters on smoking and health, but have yet to see even one on any public billboard. With India's fast-growing population, educators are gamely trying to design curricula that will teach young people about birth control, nutrition and other aspects of health; meanwhile, the tobacco industry is looking forward to a reservoir of advertising-indoctrinated youngsters.

Of course one would like to see statements of tar, nicotine, and carbon monoxide levels disclosed on cigarette packets. The industry itself has become aware of the threat to its business; thus ITC has tried to corner a new slice of the market. As one magazine so subtly put it, "The health-conscious smoker with Wills Lights, India's first mild cigarette."

With the help of the World Health Organization and the cooperation of the Indian people, it was possible to exterminate the dreaded smallpox. The antismallpox poster offering a reward for any report of suspected cases was very effective. Therefore, the image makers must be mobilized to do the same for smoking.

The budget for health care is severely strained—how do we assign priorities? Problems of sanitation, drinking water, immunization, and maternal and child health schemes still rank above smoking control. Therefore, the only answer is to make health professionals and workers aware that smoking is fast becoming a visible cause of disease and that we can avoid the hideous costs and consequences of the future smoking epidemic by doing something about it now.

As Halfdan Mahler, Director General of the WHO has said, health education information must be carried out fearlessly. Nowhere is that more true than on the issue of smoking with so many vested financial and government interests around the world at stake.

THE UNIQUE HARM OF CIGARETTE BILLBOARDS

There are three basic reasons why cigarette billboards are more harmful than other cigarette ads. First of all, billboards are difficult to ignore, since they are thrust upon the viewer. Secondly, young children will see the ads and will be unable to understand the severity of the health hazard created by smoking. Both of these reasons were given for the Congressionally mandated ban on television and radio cigarette ads. Finally, eliminating cigarette billboards would remove some of the visible pollution from the sides of our highways in furtherance of the goals of the Highway Beautification Act of 1965.

People do not choose to look at billboards as they choose to read magazines or newspapers. Billboards are intentionally placed on the sides of roadways and in our cities in order to attract the eyes and minds of people who are looking for something else, a street address, scenery, or whatever. These advertisements often have a short verbal message or a picture and seek to influence their audience at the first glance. Turning away from the billboard does not remove the effects of the advertisement, since the damage may have already been done.

Children are particularly susceptible to the ill effects of cigarette advertisements. Even before they can read, young children enjoy looking out of car windows at the new world around them. They are likely to be attracted and influenced by a cowboy smoking a cigarette, or by a huge, larger than life sized, adult smoking cigarettes. Our hope of reducing the amount of cigarettes consumed rests clearly on the possibility of preventing young people from getting hooked on this harmful and often deadly habit.

Removal of billboards will be beneficial to those interested in seeing an uncluttered view of our cities and countryside. If billboards are going to be eliminated, it would make sense to remove the most harmful ones first: the ones which preach for death and disease.

—from a Petition for Rulemaking in the
Matter of Advertising of Cigarettes on Billboards,
by Action on Smoking and Health, placed by Senator Frank Moss
in the *Congressional Record*, 120(22), February 26, 1974.

The transnational tobacco and alcohol conglomerates

A world oligopoly

FREDERICK F. CLAIRMONTE, DSC

If we expect a solution to the tobacco problem, it must be understood that this is a world problem. An analysis takes us into the critique of the political economy of global capitalism and its ramifications. Changes within the global corporation are political changes, and when we are talking about tobacco, we are obviously talking about politics. We are not simply talking about cancer. Cancer is a mere offshoot; the health element is, in a sense, a very minor aspect. We are talking about power—how that power is distributed among nations and for whom these profits are being made. Slogans like "Health for all by the year 2000" are created by bureaucrats, and are a dime a dozen. We have to strip such slogans of their metaphysics if we desire to come to grips with the underlying forces that are molding the world economy and which can bring to bear enormous political pressures on even the World Health Organization (WHO).

The tempo of annexation of the tobacco giants has moved apace, and to call them just tobacco giants is singularly misleading; prior to 1914, they never were tobacco companies. From the 1960s onward, the tempo of the concentration and centralization of capital had reached the stage where they had simply burst the confines of a one-product company. The United States was the pioneer of antitrust legislation in 1898, 1911, and 1914. President Franklin D. Roosevelt added such important measures as the creation of the Security and Exchange Commission. This tradition is now being dismantled by the Reagan administration.

The tobacco companies have been picturesquely called the Seven Smoking Sisters. At present, tobacco manufacturing in the developed and underdeveloped capitalistic economies is dominated by these seven giant tobacco transnational conglomerates (TTC) whose world sales exceeded $56 billion in 1979: British American Tobacco Company (BAT), with sales on the order of $16 billion, R.J. Reynolds, Imperial Tobacco, Philip Morris, the South African controlled Rupert/Rembrandt/Rothmans Group (now heavily controlled by Philip Morris with whom pricing policies are linked), smaller fish like American Brands and Gulf and Western. and, until it recently became part of the retailing giant Tchibo, the German company Reemtsma (one of the main financiers of the Third Reich). In terms of structure, they have the appearance of being independent companies, but they have really become multiproduct companies. And although endowed with formerly separate corporate structures, BAT and Imperial have always had certain common interlocks through joint ownership in several corporate bodies. They are an oligopoly, and by four major indicators—sales, total assets, net capital assets, and profits—the tobacco industry in the United States ranks second only to the automobile industry in degree of concentration.

The element of competition of which their spokesmen are very proud to extol is by no means incompatible with their policies of collusion. We cannot imagine, for instance, that cigarette brands are truly secret when BAT can annex Lorillard's international cigarette operations and take over the manufacture of such proprietary brands as Kent; or Philip Morris buying out the entire foreign cigarette operations of Liggett and Myers for $108 million and making the same Chesterfield brand produced in the United States by Liggett.

The irrepressible annexationist momentum of the tobacco conglomerates has been made possible not only due to the specifically addictive nature of the commodity, but also to the global working relations between finance capital and the industry. The TTCs cannot therefore be perceived as wholly separate entities from the larger banks—strikingly so in the case of the seven huge New York banks or the British "big four." The chairmen of the Deutsche bank and Mitsubishi are on the international advisory board of R.J. Reynolds. It is such massive financial leverage that permits R.J. Reynolds to acquire two corporations well in excess of $1 billion within a very short time span. Philip Morris equity shares held by banks topped 25% in 1971, of which three, Chase Manhattan, Citibank, and Morgan, held 13%, or over half the bank total.

Whether or not the tobacco corporations are funding research projects in the pharmaceutical industry and the WHO I am not in a position to say. If that is so, it is a tragedy. But what I do know is the enormous pressure that I have seen personally by the tobacco companies to influence the direction of research to eliminate certain kinds of research that they regard as inimical to their interests.

An increasingly significant commodity for the oligopoly in recent years has been alcohol. Philip Morris, the world's number three tobacco company, has become the world's number two producer of beer and is heavily involved in wines. The Imperial Group, the United Kingdom's number one cigarette producer, is also one of the corporate beer giants through its Courage subsidiary. The Rupert/Rembrandt/Rothman Group is a global cigarette colossus which also substantially controls the South African wine monopoly. Tchibo (through its Reemtsma subsidiary) is a major producer of beer as well as cigarettes. The overriding unifying factor of these firms is that they are oriented

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Based on a presentation delivered at the Fifth World Conference on Smoking and Health, Winnipeg, Canada, July 12, 1983.

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toward the global market, which determines their operational strategies. This has become even more important for tobacco and alcohol corporations, since consumption in certain developed market economies (eg, United States) has exhibited signs of stagnation in recent years. Within this framework, the conquest and further expansion of developing country markets become vital for corporate survival. Thus, the highly successful techniques of multibillion dollar mass advertising, brand proliferation, oligopolistic pricing, and collusive practices become self-reinforcing strategies in the marketing of both commodities.

In other words, one addictive commodity is now being married to another addictive commodity. Such self-reinforcing complexities must be studied at the grass roots level. As far as R.J. Reynolds is concerned, it can be defined in almost an algebraic equation:

tobacco (R.J. Reynolds) = bananas (Del Monte) =
containerized shipping (Sea-Land) = oil (Aminoil) =
alcohol (Hublein).

All of a sudden one has one of the world's largest business concerns, concentrated with vast political implications.

These corporations must be studied individually, but we must also study them within a political, economic, and social context—above all, in a context that affects our individual lives.

"THE SOCIAL ACCEPTABILITY ISSUE WILL BE THE BATTLEGROUND"

(*The following is an excerpt of a memorandum written by a cigarette company executive after observing the Fourth World Conference on Smoking and Health in Stockholm, Sweden, in 1979. It was obtained and published by* Tobakken og Vi, *magazine of the Norwegian Association on Smoking and Health.*)

I. Situation

At the 4th World Conference on Smoking and Health spiritual leaders of the antismoking front were showing their vision of a smoke-free world and trying to demonstrate the road to go there.

Particularly, Dr. Halfdan Mahler, director general of the WHO, Geneva, was a powerful visionalist, recognized as such by friend and foe. His analysis—as he gave it in his speech on global efforts for better health—the role of smoking control—gives valuable indications of the topics on which the antismoking forces will concentrate.

He pointed out the central role of the social acceptability issue. In this field nothing came up which was new to us. *It was just a confirmation of our own analysis that the social acceptability issue will be the central battleground on which our case in the long run will be lost or won.*

The second "lever" which Mahler expressly proposed to use against the fortified positions of the tobacco forces was the Third World Issue. The argument goes basically to say that the imperialistic and colonialistic white man exports or at least sells death to the people in the underdeveloped countries, and at the same time robs their anyway meager economy of huge economic assets . . . .

II. Analysis

By introducing the emotional and political powers of Third World countries, the antismoking forces have given the fight about the smoking issue a new dimension. If the social acceptability "lever" is designed to work in the society of *men*, the Third World agreement aims at exactly the same effect in the society of states.

For a state it shall be internationally and politically unacceptable to further and promote the growing and selling of leaf tobacco, the manufacturing and distributing of manufactured tobacco. The tools to achieve that are argumentations along the confrontations of black man-white man, the first being exploited in health and wealth by the second.

The march through the institutions has already begun. WHO has always been on the other side. For an organization which must look first for fields of action which justify its own existence (and its ample budget) the smoking issue is an ideal target . . . .

UNCTAD (United Nations Council on Trade and Development) has only recently committed itself to the other side, probably because they sense the stronger battalions there. Because they can have no rational argument against an economic branch being responsible for a substantial part of World Trade and one of the most important cash crops of developing countries, FAO (Food and Agriculture Organization)—although our natural ally—is showing signs of switching sides.

UN itself has naturally not been involved yet. But if all suborganizations agree that they have spotted mankind's foe Number One, we might by one process or the other even become object of UN attention (like drug traffic, slavery, etc.). This even more so because we would be a comfortable scapegoat on which everybody, red and free, black and white, rich and poor, could easily agree.

III. Objective

We must try to stop the development toward a Third World commitment against tobacco.

We must try to get all or at least a substantial part of Third World countries committed to our cause.

We must try to influence official FAO and UNCTAD policy to take a *pro* tobacco stand.

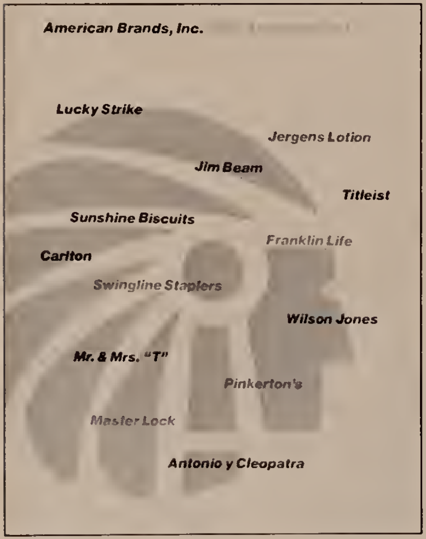
We must try to mitigate the impact of WHO by pushing them into a more objective and neutral position. . . .

The business of smoking

The following are profiles of the six major American cigarette companies, three of which are headquartered in New York City. All material for these profiles was gleaned from these sources: annual reports, The Wall Street Journal, The New York Times, Advertising Age, The United States Tobacco Journal, American Medical News, *and* Everybody's Business (*Moskowitz M, Katz M, Levering R (eds), Harper & Row, 1980*).

The American Tobacco Company

(American Brands, Inc, New York, NY)



The American Tobacco Co, a subsidiary of American Brands, is the remnant of the giant tobacco company established by Buck Duke. In 1911, the Supreme Court dissolved the monopoly into R. J. Reynolds, Lorillard, Liggett & Myers, and American Tobacco.

In 1916, American introduced Lucky Strike, which caught fire among women a decade later when adman Albert Lasker coined the slogan, "To keep a slender figure, Reach for a Lucky instead of a sweet." (Lasker later helped found the American Cancer Society.) Under American Tobacco chairman George Washington Hill, Luckies became the number one brand in the country, and did not relinquish this position until 1958. Among celebrities used to promote Lucky Strike were Al Jolson, Jean Harlow, Gary Cooper, Spencer Tracey, Robert Taylor, Douglas Fairbanks, Sr., Rex Harrison, Jack Benny, Santa Claus, Miss America, and, according to one advertisement in 1930, "20,679 physicians."

In 1964, shortly after the Surgeon General's report on smoking and health was published, American Tobacco introduced a filter cigarette, Carlton, in an effort to stem falling sales. Since 1978 the brand has sold widely as the result of the promotion of a study from the National Cancer Institute that suggested that smoking Carlton carried a substantially smaller risk for lung cancer than any other brand.

In 1969, American Tobacco changed its name to American Brands, reflecting the company's diversification into national and international consumer markets. But despite its successful diversification and its drop to fifth place among the six American cigarette makers, tobacco is still very important to American Brands. According to the 1982 annual report, tobacco is the prime performer of the corporation, with the American Tobacco Company and the tobacco division of Gallaher Ltd accounting for over $4 billion of the conglomerate's $6.5 billion in sales. American Brands is the only US cigarette company that sells more cigarettes outside the country than in it.

Since 1982 Lucky Strikes have returned in force but with a filter, and are being aimed at readers of sports pages. The slogan: "Lucky Strikes again. The moment is right for it."

Brown & Williamson Tobacco Company

(BATUS, Inc, Louisville, KY)

BATUS, Inc is a wholly-owned American subsidiary of BAT Industries, Public Limited Company of London, England, formerly British American Tobacco. The BAT group is the world's largest manufacturer of tobacco products, marketing over 300 brands of cigarettes and a broad range of cigars, pipe tobacco, and other tobacco products. It also sells cosmetics and owns paper and packaging, home improvements, and insurance businesses.

BAT formed BATUS, Inc in January 1980 in order to concentrate management of its US assets, including the Brown & Williamson Tobacco Corporation (B & W) of Louisville, KY, which it purchased in 1927, when B & W was a small company in North Carolina.

In addition to selling tobacco products through B & W the BATUS retail division, headquartered in New York City, owns major department stores in the United States, including Saks Fifth Avenue, Gimbels, and Marshall Field & Company, as well as the midwestern Kohls food stores, a food processing plant, a crabmeat company, and paper, packaging, and printing companies. The business strategy of BAT, according to the BAT annual report, is to concentrate on fast-moving consumer goods and services rather than on heavy industry and evolving technology.

B & W entered the cigarette market in the 1930s, and had modest success with low-cost, "economy" brands during the Depression. But the company was not successful until after World War II. Until then, its major brand was Raleigh, which B & W promoted by including coupons in each pack, redeemable for products. Viceroy was one of the first filter brands in the United States, but it was the success of Kool that moved B & W from sixth to third place in the US market between 1961 and 1968. Today, Kool is the fourth largest selling US brand, and is number one in the black community, where much of the adver-

AMERICAN BRANDS, INC.
New York, NY

Sales in 1982: $6.5 billion No. of employees: 52,000 Advertising spending in 1982: $72.3 million (9th in magazines, 6th in billboards) 78th leading US advertiser

ORGANIZATIONAL PROFILE	US CIGARETTE BRANDS	ADVERTISING THEME	ADVERTISING AGENCIES	SPONSORSHIPS AND PROMOTIONS
The American Tobacco Company (New York, NY) Sales in 1982: $1.2 billion No. of employees: 7,250 No. of cigarettes sold in the US in 1982: 43.6 billion Share of the US market: 7% No. of adult consumers: 3.9 million	*Carlton* " Filter " Filter, box " Menthol " 100s " 100s Menthol " 100s Filter, box " 120s Filter " 120s Filter Menthol	Health	Laurence, Charles, and Free (NY)	Lucky Strikes Again—American Dream Classic (bowling) Lucky Strike dart tournaments Lucky Strike salute to former National Hockey League players Sports page, *New York Times* and *New York Post*
American Cigar eg, *Sail*, *Flying Dutchman*, *Roi-Tan*	*Lucky Strike* " " Filters " " 100s	Virility		Women's page, *New York Times* (Carlton)
James B. Beam Distilling Co. eg, *Jim Beam* bourbon Sunshine Biscuits eg, *Hydrox*, *HiHo*, *Krispy*	*Silva Thins* " " 100s " " Menthol 100s	Slimness		
Franklin Insurance Co. Andrew Jergens Co. eg, *Jergens* lotion Swingline, Inc. staplers Master Lock Co. Acushnet Co. eg, *Titlest* golf balls Pinkerton Inc. security and investigative services	*Pall Mall* " " Filter 100s " " Light 100s Low Tar Menthol " " Light 100s " " Extra Light " " Filter King	Competitiveness	SSC & B (NY)	
MCM Products office products, auto repair, cutlery Wilson Jones Co. microcomputers and office supplies Acme Visible Records office products	*Tareyton* 85s " Lights " Ultra Low Tar Menthol " Long Lights " 100s	Taste		
	Herbert Tareyton	High-Class		
	Tall 120s " 120s Menthol	Length		

BATUS, INC.
Louisville, KY

Sales in 1982: $5.5 billion No. of employees: 46,000 Advertising spending in 1982: $235 million 24th leading US advertiser (5th in newspapers, 4th in magazines, 3rd in billboards)

ORGANIZATIONAL PROFILE	US CIGARETTE BRANDS	ADVERTISING THEME	ADVERTISING AGENCIES	SPONSORSHIPS AND PROMOTIONS
Brown & Williamson Tobacco Corp. Sales in 1982: $2.1 billion No. of employees: 9,000 No. of cigarettes sold in US in 1982: 83.5 billion Share of US market: 13.4% No. of adult consumers: 7.5 million	*Barclay* *Belair* " Filter Longs	High-class, Health	Ogilvy & Mather (NY)	Kool Jazz Festival, Carnegie Hall and other cultural centers (TV and radio commercials); goes to cities across the US Kool SuperNights (jazz, rock, and Latin music) Raleigh Lights Rodeo New York City Opera national tour Jazz programs on National Public Radio (NPR) National Tour of Phillips Collection of Washington, DC Royal Academy (Britain) Art Tour
	Kool " Filter Longs " Filter Box " Ultra " Lights " Milds	Pleasure	Cunningham & Walsh (Chicago)	
	Raleigh " Plain Ends " Filter Longs " Lights " Lights 100s	Virility		
BATUS retail Division (New York, NY) *Gimbels, Saks Fifth Avenue, Kohls Food Stores, Marshall Field & Co.* BATUS Paper Division	*Viceroy* " Filter Longs " Rich Lights King " Rich Lights 100s	Virility	Grey Advertising (NY)	

LOEWS CORPORATION
New York, NY

Sales in 1982: $4.7 billion No. of employees: 29,000 Advertising spending in 1982: $103.3 million 60th largest US advertiser (11th in newspapers, 13th in magazines, 4th in billboards)

ORGANIZATION PROFILE	US CIGARETTE BRANDS	ADVERTISING THEME	ADVERTISING AGENCIES	SPONSORSHIPS AND PROMOTIONS
Lorillard (New York, NY) Sales in 1982: $1.2 billion No. of employees: not available No. of cigarettes sold in US in 1982: 54.8 billion Share of US market: 8.8% No. of adult consumers: 5 million	*Kent* " King Size " III " Deluxe 100s " Golden Lights " Golden Lights 100s " Golden Lights Menthol " Golden Lights 100s Menthol	Virility	Foote, Cone & Belding (NY)	Kent Golden Lights Ladies Golf Classics (in Connecticut, the proceeds go to Greenwich Hospital) Kent Sports Business (column in *Wall Street Journal* each Friday) Cigarette poster advertising in Loews Theatres
CNA Financial Insurance	*Max 120s*	Fashion		
Loews Theatres e.g., Orpheum and Paramount (NY)	*Newport* (Red) " Lights " Menthol Kings	Pleasure	MCA Advertising (NY)	
	Old Gold " " Lights	Nostalgia		
Loews Hotels e.g., Regency (NY), Summit (NY), L'Enfant Plaza (Wash., DC)	*Satin* " Menthol	Fashion		
	Triumph " Menthol	Health		
Bulova Watch Company	*True* (Blue) " Menthol " 100s Menthol	Filter	Dancer, Fitzgerald, Sample (NY)	

tising is directed.

B & W promotes its products through a variety of expensive campaigns and sponsorships. In late 1980, the company introduced Barclay cigarettes with a $150 million national campaign, a record amount for the introduction of a new cigarette by a tobacco company. Barclay was introduced to catch up with the trend toward low-tar cigarettes. As part of the campaign, B & W offered free cartons of Barclay through coupons in newspapers and an 800 telephone number.

As a lure to the health-conscious, the company advertised Barclay as being "99 percent tar free," and containing one milligram of tar. The Federal Trade Commission took exception to the claim and sued B & W for false advertising. A court ruling in October 1983 barred B & W from advertising that Barclay had a certain level of tar unless the figure cited came from a test approved by the FTC.

B & W's share of the US market has been steadily shrinking and now stands at only around 12%. In response, B & W has introduced Richland, a cigarette that sells in packs of 25 instead of 20.

The corporation has promoted an association between jazz musicians and Kool cigarettes. In 1981, B & W established itself as the sole sponsor of the Newport Jazz Festival, changing the name to the Kool Jazz Festival. The sponsorship is reflected in Kool's ad line: "There's only one way to play it." B & W has also sponsored other jazz festivals around the country, as well as Latin, country and western festivals, and 1960s rock music festivals.

Brown & Williamson received adverse national publicity in 1981, when the *Lexington (KY) Herald-Leader* reported that B & W had planned an advertising campaign designed to promote confusion and doubt in the minds of the public about the dangers of cigarette smoking. In addition, the newspaper reported that the corporation had the advertising company of Ted Bates & Co, New York, prepare an advertising strategy for attracting young smokers.

According to the *Herald-Leader*, the advertising company recommended that B & W present the cigarette as an initiation into the adult world, as one of the "illicit pleasures," and as being related to pot, wine, beer, and sex. The Bates report emphasized that B & W not communicate health or health-related points, according to the newspaper article.

The newspaper further reported that a secret Federal Trade Commission report stated that B & W adopted many of the advertising agency's ideas in the development of a Viceroy advertising campaign.

Both Ted Bates and B & W denied that they were trying to entice young people to smoke, and they stated that the parts of the Bates reports quoted in the newspaper article had been taken out of context.

In addition to advertising, another component of B & W's promotion of smoking is its advocacy in 1982 of reduced trade barriers affecting tobacco and tobacco products worldwide. The corporation, working with State Department and other officials, participated in negotions with Japan aimed at lowering tariffs and reducing restraints on the marketing of cigarettes manufactured in the United States.

Liggett & Myers Tobacco Company

(GrandMet USA, Montvale, NJ)

Liggett & Myers Tobacco Co. is a subsidiary of GrandMet USA (formerly Liggett Group), owned by Grand Metropolitan Public Limited Co. of Great Britain. In Great Britain, in addition to cigarettes, the conglomerate is involved in consumer-oriented products and services, including beer, wine, liquor, food, restaurants, hotels, casinos, betting houses, and medical clinics. Recent ventures have included oil and gas exploration. Similarly, in the United States, the conglomerate has a significant presence in soft drinks, pet food, alcohol, fitness equipment, and household cleaners.

Founded in 1822, Liggett & Myers became part of the American Tobacco Company monopoly in 1899. Chesterfield was the major brand allocated to Liggett & Myers after the breakup of the monopoly in 1911. Advertising for Chesterfield was the first to cultivate smoking among women ("Blow some my way").

By 1940, Liggett & Myers controlled 22% of the US cigarette market. But sales of Chesterfield began to falter with the publication of reports on smoking and health. The company's filter cigarette, L & M ("Just what the doctor ordered") has never been a major seller. Since 1962, the company has been last of the six major cigarette makers, with current sales to approximately 2.5 million Americans. Diversification into other, nontobacco products and promotion of a nontobacco corporate identity coincided with the publication of the first Surgeon General's report on smoking and health in 1964. In 1979, the company sold its foreign cigarette business to Philip Morris. Grant Metropolitan purchased Liggett in 1980.

In the past two years of the recession, Liggett has mounted an advertising campaign for its "no-frills" generic cigarettes, sold through supermarkets and convenience stores. Thus, the name "GENERICS" has become a popular advertised brand, and Liggett sales have risen by one to two total market percentage points (each point represents approximately $200 million in sales).

Liggett is one of the 15 principal corporate benefactors of Duke University. It also sponsors a Children's Cancer Classic Celebrity Golf Tournament, in Durham, NC.

Lorillard

(Loews Corporation, New York, NY)

Founded in 1760, Lorillard is the nation's oldest tobacco company. It became part of the Duke tobacco trust, and reemerged when the trust was broken up by the Supreme Court in 1911.

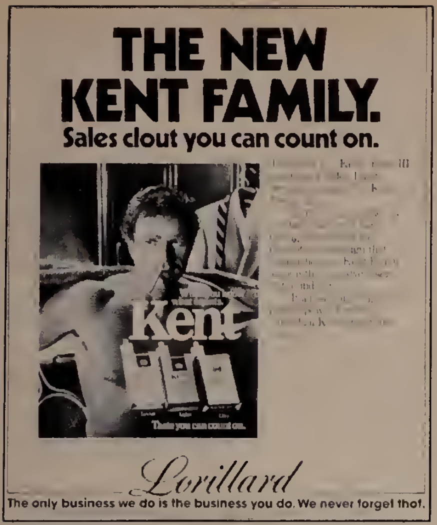
In the 1920s, Lorillard introduced Old Gold. By the early 1930s, Old Gold was a leading domestic brand, but Lorillard itself remained a small company.

In the 1950s Lorillard helped to launch the filter cigarette with a major advertising campaign for Kent which attracted the greatest consumer interest

GRANDMET USA
Montvale, NJ

Sales in 1982 $1.3 billion No. of employees: 8,600 Advertising spending in 1982: $54,000,000 91st leading US advertiser (22nd in magazines, 13th in billboards)

ORGANIZATIONAL PROFILE	US CIGARETTE BRANDS	ADVERTISING THEME	ADVERTISING AGENCY	SPONSORSHIPS AND PROMOTIONS
Liggett & Myers Tobacco Company Sales in 1982: $377 million No. of employees: 1,970 No. of cigarettes sold in US in 1982: 28 billion Share of US market: 4.5% No. of adult consumers: 2.5 million	*Eve* " Lights	Fashion	The Bloom Companies (Dallas)	Children's Cancer Classic Celebrity Golf Tournament, Durham, NC Duke University Ballet performances on the Public Broadcasting System (PBS)
	L&M " Flavor Lights " Long Lights	Taste		
	Chesterfield	Nostalgia		
	Lark	Filter		
	Generics (Regular, Kings, Ultra Light Kings, Ultra Light 100s, Menthols)	Economy		
The Pinkerton Tobacco Company e.g., *Red Man* chewing tobacco				
Allen Products pet food e.g., *Alpo*, *Liv-A-Snaps*				
International Distillers & Vintners e.g., *J&B Rare Scotch*, *Grand Marnier*, *Baileys Original Irish Cream*, *Absolut Vodka*				
Atlantic Soft Drink Company Pepsi Cola bottling franchise				
Pepsi Cola Bottling Co. of Fresno, CA				
Diversified Products Corp. physical fitness equipt.				


THE NEW
KENT FAMILY.
Sales clout you can count on.
Kent
Taste you can count on.
Lorillard
The only business we do is the business you do. We never forget that.

a new cigarette ever had up to that time. By 1968, however, the company had flagging sales. But the company did have a steady cash flow, and was purchased by Loews Theaters. The name of the company was changed to Loews Corporation, and the Lorillard cash flow was used to finance the takeover of CNA Financial Corporation, an insurance and financial services company. In 1977, Loews sold Lorillard's international tobacco brands to BAT Industries for $141 million.

In 1982, Lorillard achieved record sales and earnings for the seventh consecutive year. Part of the credit for Lorillard's performance goes to the decision in the late 1970s to enter the low-tar market.

This year, Lorillard introduced Satin (with an advertising budget estimated by *Advertising Age* to be $50 to 60 million), a cigarette for women that may have the most candid slogan of any brand: "Spoil yourself."

Another Lorillard advertising strategy has been to link food to smoking. The Kent logo has been symbolically extended to various gourmet delicacies, including French bread, Brie, fine wine, fish, pastry, and even ice cream.

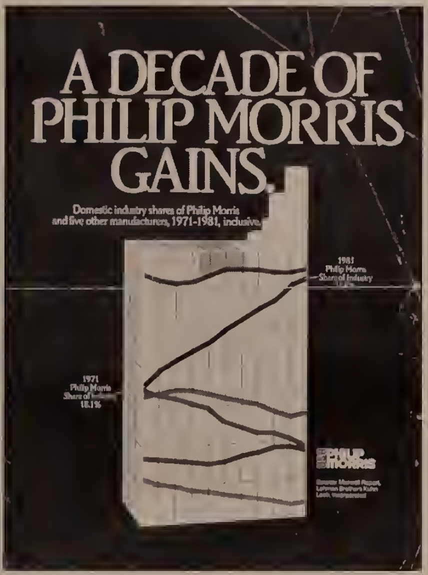
According to the annual report, Lorillard's president, Curtis H. Judge, is current chairman of the executive committee of The Tobacco Institute, and is a leading opponent of raising cigarette excise taxes. Judge has also tried to convince manufacturers who share the tobacco industry's distribution channels, such as the candy industry, that the tobacco companies' struggle for credibility and survival is linked to theirs.

In his keynote address at the opening session of the 1982 National Association of Tobacco Distributors convention, Judge said that these industries have an important stake in the tobacco industry's ability to withstand the assaults of its opponents, who he identified as legislators seeking revenue and publicity, groups seeking the prohibition of smoking, and assorted do-gooders. What the industry needs now, he said, are "friends from outside the tobacco family, people who are willing to stand up and face down the tobacco prohibitionists; people who are fed up with what's being done to smokers; with what's being done to the tradition that is tobacco and to the important economic role that is played by tobacco . . . ."

The chairman of the board and chief executive officer of Loews Corporation is Laurence Tisch, who is also Chairman of the Board of Trustees of New York University. The president of NYU, John Brademas, is on the board of directors of Loews Corporation.

Philip Morris USA

(Philip Morris, Inc, New York, NY)



Philip Morris, Inc, headquartered in New York City, is the second largest cigarette maker in the United States. Originally a British company, Philip Morris was taken over in 1919 by its American stockholders.

The company owns nine cigarette manufacturing facilities, one of which has a daily production of 600 million cigarettes.

Over half of Philip Morris' budget for expansion of its tobacco market goes to its international market, and increasingly to Third World countries.

Until the 1950s Philip Morris' Marlboro was a woman's brand ("Ivory tips to match red lips and finger tips"), but the addition of a tattoo, a cowboy hat, a theme song from "The Magnificent Seven," and a filter made Marlboro the third largest seller by 1970; it moved into first place in 1976, and is billed by the company as the world's largest selling cigarette.

In 1976, Philip Morris headed off unfavorable publicity for Marlboro by blocking the showing in the United States of a British documentary called "Death in the West," a film made for the British Broadcasting Corporation. The film interlaces old Marlboro commercials with interviews of Philip Morris officials defending smoking and with interviews of cowboys dying from lung cancer. In September 1976, the film was shown in London to an estimated 12 million viewers. Philip Morris sued Thames Television and obtained a court order preventing the film from being shown. The company claimed that it had been deceived into allowing clips from their commercials to be used for "Death in the West." *American Medical News* (October 14, 1983) reports that "Death in the West" has now been seen on a California TV station and is being used as the basis for an antismoking project in schools in California. Copies of the "Death in the West" curriculum may be obtained from California Nonsmokers' Rights Foundation, 2054 University Avenue, Suite 500, Berkeley, CA 94704. The film was distributed to 300 public TV stations for broadcast during the week of November 6, 1983.

In 1981, Philip Morris initiated a public opinion survey, the Merit Report, designed to gain TV exposure for the Merit brand name as a news event. Philip Morris also gains television exposure for its brands through sponsorship (by Marlboro or Virginia Slims) of many major American spectator sports.

According to its annual report, Philip Morris believes that "our business activities must make social sense, and our social activities must make business sense." The company last year marked the 25th anniversary of its sponsorship of the arts by announcing a $3 million grant to help underwrite "The Vatican Collections: The Papacy and Art." Philip Morris also sponsors scholarship programs and science symposia. Philip Morris challenges assertions that there is conclusive medical proof of a cause-and-effect relationship between smoking and health. In the 1982 annual report,

PHILIP MORRIS, INC.
New York, NY

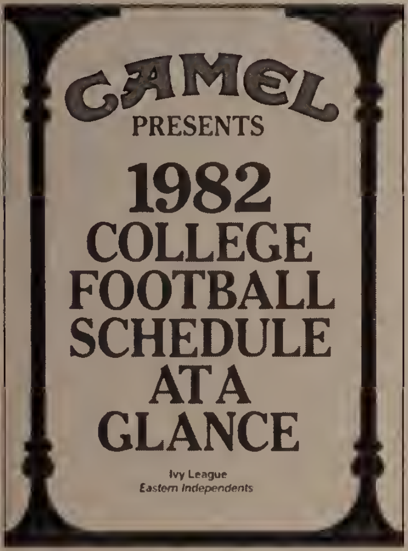
Sales in 1982: $11.7 billion No. of employees: 72,000 Advertising spending in 1982: $501.7 million 5th largest US advertiser (3rd in newspapers, 1st in magazines, 2nd in billboards)

ORGANIZATIONAL PROFILE	US CIGARETTE BRANDS	ADVERTISING THEME	ADVERTISING AGENCIES	SPONSORSHIPS AND PROMOTIONS
Philip Morris USA (New York, NY) Sales in 1982: $4.3 billion No. of employees: 19,900 No. of cigarettes sold in US in 1982: 204.4 billion Share of US market: 32.8% No. of adult consumers: 18 million	*Benson & Hedges* " " 100s " " 100s Menthol " " 100s Lights " " Deluxe " " Lights Menthol " " 100s Deluxe Ultra Lights " " 100s Deluxe Ultra Lights Menthol	High-Class	Wells, Rich, Green (NY)	*Sports* Virginia Slims Tennis Circuit, televised Other tennis promotions worldwide (eg, Marlboro Australian Open) Marlboro British Grand Prix auto race; other races worldwide Marlboro Cup horserace, Belmont Park, NY, televised Billboards at key camera angles of most major league baseball and football stadiums Major advertiser in official National Football League publications, Major League Baseball, other sports magazines US Olympic Training Center Miller Hi Life Citizen Player of the Month and Game (football, baseball)
	Players	Popularity		
Philip Morris International (New York, NY) 160 brands of cigarettes in 170 countries	*Cambridge* " 100s	Health	Leo Burnett USA (Chicago)	
Miller Brewing Company *Miller High Life, Miller Lite, Lowenbrau* The Seven-Up Company *7-Up, Diet 7-Up* Philip Morris Industrial packaging Mission Viejo Company home building	*Marlboro* " Filter " Filter Box " Filter King 100s " Lights " Lights 100s " 100s " 100s box " 100s Menthol, box	Virility		*Cultural* Joffrey Ballet tour Music from Marlboro, 28-city chamber music tour Marlboro Country Music tour "Salute to Marlboro" (chamber music) WNCN radio, New York Art Exhibitions, 1982–84: Champions of American Sport (American Museum of Natural History, others); Buffalo Bill and the Wild West (Brooklyn Museum, others); Kandinsky (Solomon R. Guggenheim Museum, others); Grand Central Terminal (New York Historical Society); Lewis Carroll and Alice (Pierpont Morgan Library); Oom Pah Pah: the Great American Band (New York Historical Society); Edward Hopper (Whitney Museum of American Art, others); The Vatican Collections: The Papacy and Art (Metropolitan Museum of Art, others).
	Merit " Kings " Kings Menthol " 100s " 100s Menthol " Ultra Lights 100s " Ultra Lights 100s Menthol " Ultra Lights Kings " Ultra Lights Kings Menthol	Taste		
	Saratoga " 120s " 120s Menthol	Length		*Other* The Philip Morris Science Symposium (featuring Nobel prize winners in medicine) Career scholarship programs Vocational/Technical Career Scholarship Programs for high school drop-outs Grants for tobacco research (North Carolina State, University of Tennessee, University of Kentucky) Marlboro Country Store (mail order items with Marlboro logo) Virginia Slims Ginny Jogger Suit (mail order) Virginia Slims Book of Days (calendar and appointment book) Free sample distributions on major city streets, shopping centers Philip Morris Marketing/Communications Competition "Agriculture in the Twenty-First Century" (symposium)
	Virginia Slims " " 100s " " 100s Menthol " " 100s Lights " " 100s Lights Menthol	Slenderness, Independence		
	Parliament " King	Filter	Doyle Dane Bernbach (NY)	Public Relations Firm: Ruder & Finn (New York, NY)

the company informed its stockholders that "no one knows what causes cancer or other chronic diseases claimed to be related to smoking." Philip Morris spends money to influence legislation affecting smoking. The company contributes to campaigns in the United States and in New York State that are aimed at defeating legislation that would restrict smoking in public places.

R. J. Reynolds Tobacco Company

(R. J. Reynolds Industries, Inc,
Winston-Salem, NC)



R. J. Reynolds Tobacco Company and R. J. Reynolds Tobacco International, Inc, are part of the multi-national conglomerate R. J. Reynolds Industries, or RJR. It competes with Philip Morris for the position as the leading American tobacco company. Each has roughly one third of the US market. RJR's 1982 earnings were $13.057 billion.

The world headquarters of RJR is in Winston-Salem, where the company was founded as a chewing tobacco factory in 1894. It was later a part of the American Tobacco monopoly that the Supreme Court broke up in 1911.

Reynolds entered the cigarette market with Camel in 1913. During World War I, Reynolds provided American soldiers in France with free Camel cigarettes. A decade later, about half of America's smokers smoked Camel. The company also gave free cigarettes to Cuban refugees in 1981. Camel was one of the first sponsors during the early days of radio and television.

In the 1982 annual report, J. Paul Sticht, Chairman and Chief Executive Officer, explained that the philosophy of Reynolds has been to acquire or develop businesses in the consumer products area that have a dominant or leading position in their respective industries.

Accordingly, Reynolds has acquired, among other companies, the largest processor of fruits and vegetables (Del Monte), the largest chicken restaurant chain (Kentucky Fried Chicken), the world's largest containerized shipping company (Sea-Land), and one of the largest independent petroleum exploration and production companies in the United States. In 1982, RJR also bought Heublein Inc, the nation's second largest producer of wine and hard liquor, for $1.39 billion. Heublein's holdings include Smirnoff Vodka, Harvey's Bristol Cream, and A-1 Steak Sauce.

Reynolds Tobacco International, Inc, began exporting Winston and More to China in 1979. Since 1980, the Xiamen Cigarette Factory in China has been producing Camel filter cigarettes under contract to Reynolds Tobacco. A subsidiary of Reynolds, R.J.R. Archer, provides the technology for packaging the cigarettes.

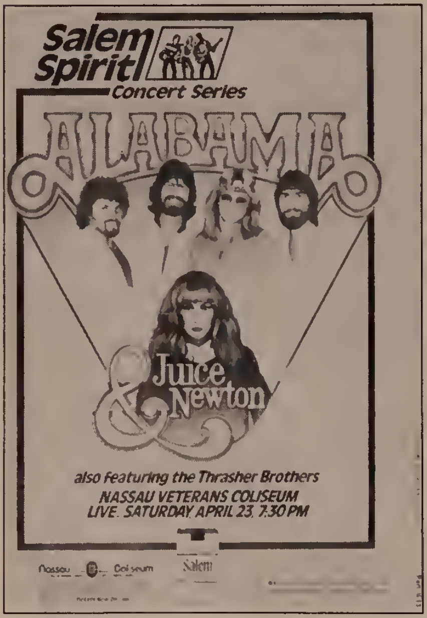
Reynolds was the nation's fourth largest advertiser in 1982, with $530.3 million in ad spending. It is the single advertiser in *Moviegoer*, a magazine that is distributed to about 100 major markets, including hundreds of movie theaters.

The cigarette company also sponsors sports and music events. Camel cigarettes sponsors the sports scoreboard page of some newspapers, including the New York *Post*, and the company designed a collection of sportswear to emphasize what it describes as the hardy, rugged image of the Camel smoker. Camel also sponsors advertisements for rock concerts in the *Village Voice*, one of which is entitled the "Camel Sound-Board," which lists times and locations of concerts for that week. Another brand, Salem Light, sponsors the Salem Light Concert Series of rock music. Winston, which sponsors sports, backs motorcycle racing championships, and was one of the sponsors of the 1982 World Soccer Cup in Spain. Reynolds also markets its cigarette products through travel agencies, and adventure trips to Maine, Ecuador, and the Caribbean.

Reynolds supports a grassroots community projects organization, the Future Farmers of America's Building Our American Communities (BOAC) program, which encourages high school students to address community needs. The company also supports various education programs and research at various medical research centers, including a research fellowship in biomedical sciences at Rockefeller University in New York.

The Public Policy Commitee of RJR, which is made up of members of the board of directors, includes Juanita M. Kreps, former United States Secretary of Commerce, and Vernon E. Jordan, Jr, former president of the National Urban League, Inc.

Reynolds has promoted smoking and defended the tobacco industry in several ways. It has also produced pamphlets on the economic contributions of tobacco to the United States and to southern states, and a rebuttal of medical evidence showing the health-damaging effects of smoking. The company is now building a new, two-million-square-foot cigarette manufacturing facility in Tobaccoville, North Carolina.



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R.J. REYNOLDS INDUSTRIES, INC.
Winston-Salem, NC

Sales in 1982: $13.06 billion No. of employees: 117,000 Advertising spending in 1982: $530 million 4th leading US advertiser (1st in newspapers, 2nd in magazines, 1st in billboards)

ORGANIZATION PROFILE	US CIGARETTE BRANDS	ADVERTISING THEME	ADVERTISING AGENCIES	SPONSORSHIPS AND PROMOTIONS
R.J. Reynolds Tobacco Company Sales in 1982: $3.5 billion No. of employees: 14,815 No. of cigarettes sold in US in 1982: 208.9 billion Share of US market: 33.5% No. of adult consumers: 18 million	*Camel* " Regular " Filters " Lights " Lights Hard Pack " Lights 100s	Virility	McCann-Erickson (NY)	Camel Scoreboard (sports sections of over 100 daily newspapers) Camel Soundboard (concert schedules in newspapers)
	Bright " 100s	Taste	Leber Katz Partners (NY)	Camel Ski Days (Brodie Mt., MA and Hunter Mt., NY)
R.J. Reynolds Tobacco International. Inc. worldwide cigarette manufacturing	*More* " Filter 120s " Menthol 120s " Lights Filter 100s " Lights Menthol 100s	Fashion		Camel Expeditions (wilderness adventure) Winston Team America Series (soccer)
Del Monte Corporation eg, *Del Monte* fruits and vegetables, *Hawaiian Punch*, *Vermont Maid Syrup*, *Chun King*, *A-1 Steak Sauce*, *My-T-Fine Pudding*	*NOW* " Filter " Filter 100s " Menthol " Menthol 100s	Health		World Cup soccer championships Western Rodeo Series
Heublein Spirits & Wine Company eg, *Smirnoff* vodka, *Black Velvet Canadian* whiskey, *Ingelnook* wines, *Lancers*, *Harveys Bristol Cream*	*Vantage* " Filter " 100s " Menthol " Menthol 100s " Ultra Lights " Ultra Lights 100s " Ultra Lights Menthol " Ultra Lights Menthol 100s	Success		International Hot Rod Association American Motorcycle Association (AMA) International Motor Sports Association
Kentucky Fried Chicken Corporation eg, *Kentucky Fried Chicken*, *H.Salt Seafood*, and *Zantigo* Mexican restaurants Aminoil USA, Inc. exploration and sale of oil and natural gas	*Salem* " King " 100s " Lights " Lights 100s " Ultra Lights " Ultra Lights 100s " Slim Lights	Pleasure	William Esty Co. (NY)	More Filter Fashion Show Tour (shopping centers) Inter-American Festival of the Arts, Puerto Rico National Park Service summer rhythm and blues and theatre programs
Sea-Land Industries Investments, Inc. containerized shipping R.J. Reynolds Development Corporation packaging	*Winston* " Box " King " 100s " Lights " Lights 100s " Ultra Lights " Ultra Lights 100s	Virility		Salem Spirit Street Scenes (inner city concerts) R.J. Reynolds Research Fellowship (Rockefeller University)
Bear Creek Corporation fruit, garden plants	*Century*	Economy	Tatham-Laird & Kudner (Chicago)	

BUGA-UP (Billboard Utilizing Graffitists Against Unhealthy Promotions)

An Australian movement to end cigarette advertising

ARTHUR CHESTERFIELD-EVANS, MB BS

On national, state, and local levels, Australian health professionals are making a determined bid to eliminate all forms of cigarette advertising.[1-4]

During the past decade public awareness of cigarette smoking as a major health problem has increased, in large part due to efforts of such groups as the Victorian Anti-Cancer Council, the Australian Council on Smoking and Health, and the National Heart Foundation.

However, as in the United States, certain early successes such as the ban on televised cigarette advertising in 1975 have been undermined by stepped-up cigarette advertising in other media, combined with tobacco company promotions designed to keep a favorable image of brands of cigarettes in the public eye. A survey of Sydney teenagers showed that they smoke the most advertised brands out of proportion to the rest of the smoking population.[5]

In 1979 when even recommendations by a Senate committee for a complete ban on cigarette advertising[6] had gone unheeded, a group was formed in Sydney to mobilize greater public attention to the pervasiveness of advertising for cigarettes and other harmful products.

The group, BUGA-UP (Billboard Utilizing Graffitists Against Unhealthy Promotions), has relied on satire rather than health messages as a way of making omnipresent cigarette company trademarks such as the Marlboro man an object of ridicule. BUGA-UP's main weapon is not buttons or brochures but the spray can with which to "reface" billboard advertising and thus call attention to the original advertisement. As a BUGA-UP member explained in 1980 in its annual report,

> What we are trying to do with our graffiti is to expose the devices the advertisers are using to exploit us—demystifying their process. The advertisements use two main ways to promote their products, sexuality (both male and female) and insecurity. They do that by setting up a situation visually and verbally where the viewer is made to feel somehow insecure or inadequate, and then imply that by consuming the product they can be saved from the terrible situation in which they find themselves. The billboards say 'all you've got to do is buy this product and you'll enter this terrific fantasy.' The product can no longer exist without the fantasy.

The group has attracted hundreds of people of all ages, including physicians, journalists, teachers, and clergymen. It has also attracted the attention of the police: 38 arrests were recorded to members of BUGA-UP between 1980 and 1983, including five physicians. But in general both the police and the courts have not been unkind to BUGA-UP. Imposing a fine of $35, one magistrate said to two defendants, "I have the utmost sympathy for you, or any person doing what he thinks can be done to remedy the situation" (*Sydney Morning Herald*, February 25, 1982). BUGA-UP's legal defense to the charge of "malicious damage" (the definition of which involves "indifference to human life and suffering") has been turned around to suggest that the billboards aren't damaged but improved. The defense of necessity has been used, whereby if one bursts into a burning house to save a child from fire but is then charged with trespassing one can be acquitted on the grounds that the crime was committed to prevent a greater evil. This defense has stimulated discussion in the legal community. One lawyer for BUGA-UP has suggested serving a Writ of Mandamus against Ministers (an action to compel persons in office to discharge a public duty) for having failed to ban cigarette advertising. Another legal authority suggests it could be an offense to conspire to encourage people to smoke: "People are allowed to kill and injure themselves, but they are not allowed to encourage others to through the use of insidiously subtle psychology."[7]

As advertisers' activities diversified into more subtle sponsorship, BUGA-UP stepped up its counterattack. In September 1981 a nationwide advertising campaign was launched by Philip Morris to find the "Marlboro man of Australia," someone, according to the entry form, with a "strong and distinctly individual masculinity." A group of Sydney health workers entered a patient who had for years smoked through a tracheostomy tube, and BUGA-UP funded the distribution of the entrant's campaign poster showing him in his wheelchair holding up a pack of Marlboro cigarettes.[8] Thousands of these posters were posted over cigarette advertisements on shops, and when BUGA-UP announced that its entrant would attend the major public presentation Philip Morris retreated and released the name of the "winner" at a private party.

In August 1982 a racing car plastered with Marlboro decals were displayed in the Art Gallery of New South Wales, as an example of technology as an art form. (A concurrent exhibition at the Gallery, "The World of Edward Hopper," originated from the Whitney Museum in New York under the sponsorship of Philip Morris.) The chaining by an artist-sympathizer of BUGA-UP to the car in the course of a public demonstration against this form of cigarette promotion resulted in the car's permanent withdrawal from the Gallery. More importantly, the action raised questions about the propriety of such sponsorship at

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Based on a presentation delivered at the Fifth World Conference on Smoking and Health, Winnipeg, Canada, July 14, 1983.

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public-supported institutions.

Other widely reported activities have included an exposé of the increasing involvement of Amatil (British American Tobacco's Australian company) in the Australian Ballet and other cultural bodies, and opposition to the proliferation of cigarette advertising at the Royal Easter Show, (akin to an American State Fair), the premier children's event of the year. Along with a Melbourne-based kindred group MOP UP (Movement Opposed to the Promotion of Unhealthy Products), BUGA-UP has protested attempts to circumvent the law prohibiting cigarette advertising and sponsorship on television such as Philip Morris' Marlboro Australian Open Tennis Championships.

Far from incurring public disdain for "vandalism," as the tobacco industry and billboard companies would claim, there is no doubting that the real vandals are cigarette companies and those who defend their activities. BUGA-UP can be credited with having brought the issue of cigarette company business practices before the public eye. Physician-members of BUGA-UP, who have been hailed by the media as "The Doctors Who Fight Cancer with Spray Cans" (*Sydney Morning Herald*, February 19, 1983), have been much sought-after speakers at medical meetings and at primary and secondary schools and universities.

Even if a total ban on cigarette advertising comes about in the next couple of years, as now seems likely, BUGA-UP will not become complacent about other ways in which cigarette manufacturers may aim at children. The individuals in BUGA-UP are committed to counteracting the pervasive pushing of unhealthy products in Australia, especially the loathsome activities of the tobacco industry.

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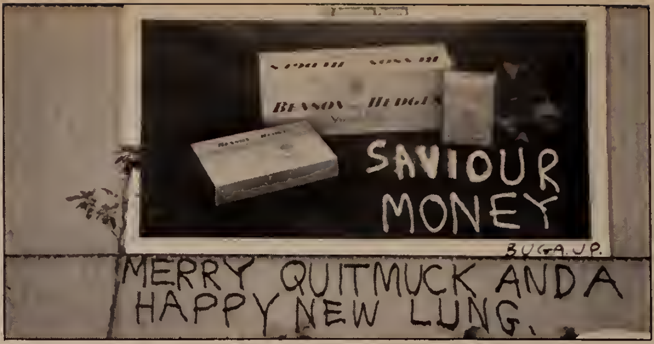
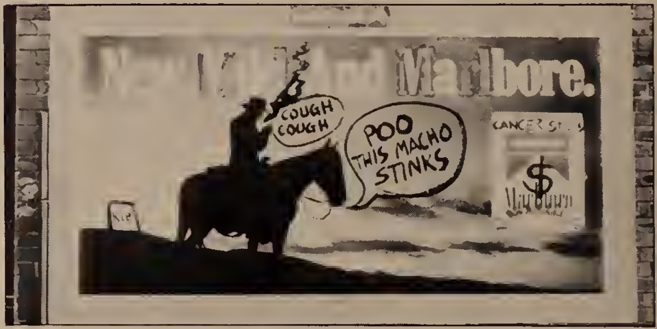
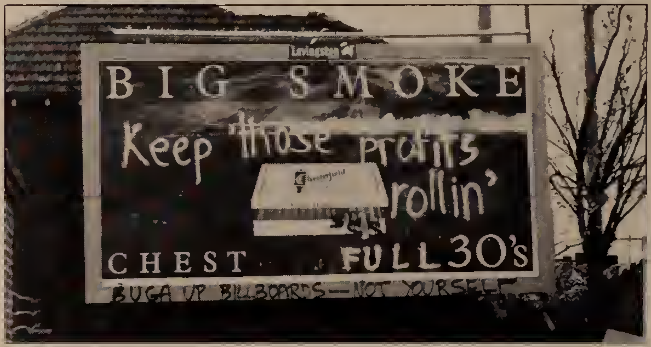
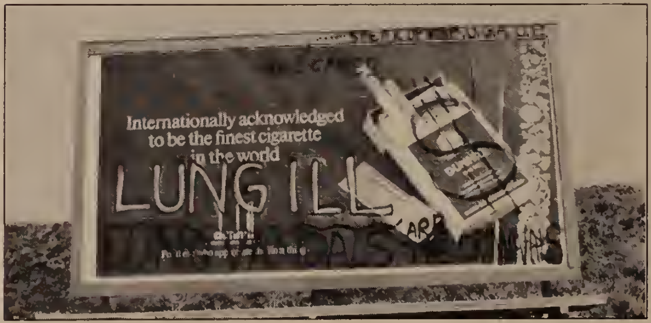
It is slowly dawning on Australians that green playing fields are not worth black played out lungs.
Good sports don't need tobacco subsidy.








Internationally acknowledged to be the finest cigarette in the world
LUNG ILL

B.U.G.A. U.P.
Billboard-Utilising Graffitists Against Unhealthy Promotions
B.U.G.A. U.P. SPEAKS UP
BUGA UP BOX 78 WENTWORTH BLDG. UNIVERSITY OF SYDNEY. 2006 NSW AUSTRALIA

Community-based strategies to fight smoking

Experiences from the North Karelia Project in Finland

PEKKA PUSKA, MD, PHD, KAJ KOSKELA, MD

INTRODUCTION

Since World War II a few noncommunicable diseases (NCD) have become leading public health problems in most of the industrialized world. Especially dramatic has been the increase in cardiovascular disease (CVD) rates, notably for coronary heart disease (CHD). In many countries every second premature death is due to cardiovascular disease. Thus any progress in public health, especially concerning prevention of premature mortality and disability, hinges on preventing the modern epidemic of heart disease and related noncommunicable diseases.

Extensive research has revealed that certain factors are related to CVD and other major NCDs. Although our knowledge is far from complete, it is likely that many of these factors are causal. We should also note that modification of these risk factors is safe and such changes would not only prevent specific diseases, but often promote health in general. One of the important, if not the most important, of these factors is smoking. Thus reduction in population smoking rates is a key target for control of major NCDs and for promotion of health, and thus for improvement of public health in large parts of the world.

THE NORTH KARELIA PROJECT

The toll of NCDs, especially CHD, has not been equal among all industrialized countries. In the 1960s the highest CHD mortality rates in the world were observed among men in Finland. These differences among countries were confirmed in the beginning of the 1970s by a World Health Organization (WHO) coordinated register study. Similar studies showed that there were some regional differences also within Finland, so that the highest rates were observed in Eastern Finland, especially in the county of North Karelia.

This information caused alarm about the state of public health in Finland. In 1971 the North Karelian population petitioned the Finnish Government to do something to reduce the extremely high heart disease rates in this largely rural county of 180,000 inhabitants in Eastern Finland. The North Karelia Project was formulated and launched in 1972 in close cooperation with Finnish experts and WHO. The aim of the project was to carry out a comprehensive community-based program for control of CVD and to promote health in the whole of North Karelia. This effort was considered a major national pilot program to evaluate its potential for nationwide and international use. A comprehensive community-based strategy was chosen which would favorably influence these factors by promotion of healthy lifestyles in the whole community.[1]

The program has encouraged people in North Karelia to stop smoking, to change their diets, and to have their blood pressure controlled. As far as smoking is concerned, the primary objective has been cessation of smoking. Reduction in the number of cigarettes smoked has been secondary. Change to low-tar cigarettes has not been promoted. In recent years, smoking prevention among children has also been promoted.

A broad range of activities has been integrated into the local social organization and the existing service structure of the area. The activities have mainly been carried out by the community itself. The role of the project has mainly been to prepare the guidelines and necessary materials, to provide training and feedback, and to coordinate the activities. The effort to influence smoking has been based on such behavioral principles as increased health information, provision of preventive services, persuasion, teaching of practical change skills, provision of social support, environmental modifications, and community organization.[3]

During the first five years of the program the local newspapers published about 250 articles on smoking and many more about prevention of heart disease in general. The local radio broadcast several nonsmoking messages of the project. During the same period 45,000 antismoking leaflets of the project were distributed. Also other antismoking materials were used, including 150,000 copies of signs and stickers "Do not smoke here—we are in the North Karelia project." Local authorities and civic organizations were asked to promote nonsmoking areas in their facilities. Local physicians and nurses were asked to inquire about smoking, and to give advice about cessation to their patients. Specific smoking cessation courses were organized. Information on smoking was included in patient cards and files. During the same initial five-year period, 39 seminars were arranged for local health personnel for training of various education skills. Finally, a network of lay leaders was established and trained to promote nonsmoking and other healthy life styles.

Evaluation. The program evaluation in North Karelia was designed to assess the program feasibility, and its effects on health behavior, related risk factors, disease rates, and program costs. In addition, interdisciplinary research has been carried out to study various background factors and experiences associated with the activity. The coordinating center of the project is at the National Public Health Institute in Helsinki. The Institute, together with the National Board of Health, also monitors national smoking trends.

Risk factor and health behavior changes in North Karelia

From the Department of Epidemiology, National Public Health Institute (Dr Puska) and the Health Education Office, National Board of Health (Dr Koskela) Helsinki Finland.

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have been assessed by examinations of large cross-sectional random population samples. Changes in North Karelia have been adjusted for respective changes in a matched reference area to assess the program effect ("net change" in North Karelia). Major population surveys in North Karelia and the reference area were carried out at the outset (in 1972), and five years (in 1977) and ten years (in 1982) later. Each survey included nearly 10,000 subjects. Participation rates varied between 80% and 94%. In addition, surveys of smaller population samples have been carried out annually or biannually by mail to monitor the actual change process over time. Disease rates in North Karelia have been monitored by special myocardial infarction and stroke registers in North Karelia according to WHO criteria. Mortality and disability pension have been followed through official national data.[4]

A systematic monitoring of national smoking trends was started in 1978 by annual mail surveys and using cross-sectional random national population samples (N = 5,000-6,000). In addition, national tobacco sales information and existing information of other studies are used.

Results. In North Karelia in 1972–1982, reported smoking rates among men fell about 10% during the first year and then remained constant until further reduction after 1978. Among women, changes were smaller, with some increase in the 1978–1980 period.

Table 1 shows the amount of reported daily smoking (daily number of cigarettes, cigars and pipefuls per subject) in North Karelia and the reference area, as given by the three major surveys in 1972, 1977, and 1982. Among men, smoking clearly declined in North Karelia; among women smoking increased somewhat. When the net change was calculated, during 1972–1977 a net reduction in North Karelia in smoking was observed for both men (13%, p <0.01) and for women (8%, n.s.). From 1977 to 1982 a further reduction took place among men, more so again in North Karelia than in the reference area. Thus the net reduction in North Karelia from 1972 to 1982 was 28% (p <0.001). Among women, smoking increased from 1977 to 1982 in both areas, but again more in the reference area. Thus the net reduction in North Karelia among women from 1972 to 1982 was 14% (p <0.05).

To validate the self-reported smoking data, thiocyanate was determined in all serum samples of the 1982 survey. The age-adjusted partial correlation between reported daily amount of smoking and serum thiocyanate was 0.72 among men in North Karelia and 0.67 in the reference area. Among women it was 0.69 and 0.70, respectively.

According to available national data, smoking declined in the 1960s and 1970s gradually in the whole country. The smoking trends for the whole country and for North Karelia are shown in Table 2 from 1978 to 1982, during which period comparable national data are available. During the last two years of this observation smoking among men was for the first time less common on average in North Karelia than in Finland.

TABLE 1. Mean Amount of Reported Daily Smoking in North Karelia and the Reference Area in Independent Baseline (1972), 5-year (1977) and 10-year (1982) Follow-up Survey Samples.

	Men		Women	
Year	North Karelia	Reference Area	North Karelia	Reference Area
1972	10.0	8.5	1.1	1.2
1977	8.5	8.5	1.1	1.3
1982	6.6	7.8	1.7	1.9
% net change in North Karelia				
1972–1977	13**		8	. . .
1972–1982	28***		14	. . .

** p = <0.01
*** p = <0.001

TABLE 2. Prevalence of Smoking in North Karelia and the Whole of Finland Among Men and Women According to Similar Surveys of Random Population Samples Aged 15–64.

	Men		Women	
Year	North Karelia	Whole of Finland	North Karelia	Whole of Finland
1978	44	39	18	19
1979	37	37	16	20
1980	38	38	15	18
1981	36	38	16	21
1982	31*	35	16*	19

* Preliminary data

TABLE 3. Relative Net Reductions in the Risk Factor Means Among Men and Women Aged 30–59 Years in 1972–1977 and 1972–1982.

Risk Factor	Net reduction, %†			
	Men		Women	
	1972–77	1972–82	1972–77.	1972–82
Daily smoking	14 ± 10**	28 ± 11***	8 ± 27	14 ± 38
S-cholesterol	4 ± 1***	3 ± 2***	1 ± 2	1 ± 2
Systolic BP	3 ± 1***	3 ± 1***	5 ± 1***	5 ± 1***

† (North Karelia, 1982/77-1972)—(Reference area, 1982/77-1972)/North Karelia 1972 with 95% confidence interval. Statistical significance based on two-way ANCOVA with covariance adjustment for age.
** p = <0.01
*** p = <0.001

Table 3 shows the net reduction in North Karelia (ie, those adjusted for changes in the general reference area) in the levels of all the three main risk factors during the 10-year period from 1972 to 1982 for both men and women. As a whole, the net reductions obtained in 1972–1977 were maintained during the subsequent follow-up.

During the period from 1969 to 1979 CHD mortality among the middle-aged male population declined 24% in North Karelia. Most of the decrease in North Karelia took place during the last six years of the period (ie, after the initiation of the program). Thus for the 1974–1979 period the reduction in age-standardized male CHD mortality was 22% in North Karelia. During this same period the respective reduction was 12% in the reference area and 11% in all Finland (less North Karelia) (p <0.05) when compared with North Karelia. CHD mortality also decreased among women in North Karelia: 51% among the middle-aged female population from 1969 to 1979. This decline among women in North Karelia was significantly greater than for the rest of the country. Because the actual number of CHD deaths was much smaller among women, the decline in deaths was much greater among men.

DISCUSSION

Influencing people's smoking is not an easy task. Even if the health hazards of smoking are well known, many activities to fight smoking have met with limited success. We consider the results and experiences presented here as an encouraging indication that, at least in favorable conditions, a comprehensive, determined and well-planned activity can indeed lead to substantially reduced smoking rates. The evaluation in North Karelia has further demonstrated that this development, together with other favorable risk-factor changes, has led to reduced cardiovascular disease rates.

The magnitude of the disease problem and the awareness of the population, especially in North Karelia but also in the whole of Finland, has been an important factor for the positive results. It might also be speculated that certain cultural factors and a well-organized primary health care system have contributed to the results. On the other hand great concern was expressed in the planning stage because the area was rural, and was of low social economic status with high unemployment and few medical resources. The baseline findings showed that the risk factors, including smoking, were clearly associated with rural living, low education and income.[5] In health and socioeconomic development, North Karelia was the worst of the Finnish counties.

Smoking and other CHD risk factors are closely connected with general lifestyle. Thus the intervention program was directed at the whole community. The aim was to introduce a general community action, using the service structure as a backbone. The role of the project was to catalyze and promote activities that would enable people themselves to make the necessary changes in their habits. The project team, in close contact with the community, outlined the different activities and provided materials and training. It was realized from the very beginning that mere provision of information about the health hazards of smoking would not be enough. Teaching people practical skills to stop smoking was emphasized. Various methods of persuasion were applied; people were asked to comply, not necessarily to reduce their own disease risk, but as part of a common action and of county pride. A community program can also promote such changes in the environment that favor nonsmoking and increase social support in favour of smoking cessation and nonsmoking. Since smoking is ultimately a community problem, the North Karelia project used community organization, ie, involving all segments of the community as much as possible, to achieve the set goals.

Independent random sample surveys were used to assess the magnitude of changes in the whole population, since follow-up of a cohort would not have been able to distinguish intervention effect from evaluation effect. Strictly standardized and similar questionnaires were used on large samples in both areas for the three surveys. The participation rates were also relatively high. The validity of smoking history could be reduced by incorrect self-reporting. The results of the serum thiocyanate analysis showed no major differences between the two areas in the validity of self-reported smoking.

Results of the surveys in North Karelia show the magnitude of smoking changes in the area. Because the change may partly or totally be due to "national" or "spontaneous" change, similar information from the reference area was used. The effect of the program was considered the change in North Karelia minus the change in the reference area. This estimate is a conservative one, because it is likely that the project influenced the development also in the reference area and nationally, as will be discussed later.

The results show that smoking among the North Karelian male population decline considerably during this 10-year period. In the 25–29 age group 52% of the men were smoking at the outset of the project. In 1982 only 32% of the male population smoked. Thus, nearly every second man who smoked in 1972 had permanently stopped smoking by 1982. The trend analysis showed that the initial campaigns of the project were associated with a considerable reduction in smoking. After that the new level was maintained. After 1978 a further substantial reduction took place, possibly due to the intensified field activities in North Karelia carried out in connection with the project's national TV health education programs.[2,9] Smoking among women showed a slight increase toward the end of the period, which was expected, since younger women cohorts who had learned the habit of smoking grew older. Still, the increase in female smoking in North Karelia was smaller than that in the reference area.

When the reference area changes were taken into account the net reductions in North Karelia during the first five-year period were 13% for men and 8% for women. This was due to both reduced prevalence and somewhat reduced number of cigarettes smoked by each individual. During the second five-year period the difference between North Karelia and the reference area further increased: the net reduction for the whole period 1972–1982 in North Karelia was 28% for men and 14% for women. This was largely due to reduction in the prevalence of smoking.

It is difficult to compare smoking rates in North Karelia with the national rates before 1978 due to lack of comparable data. It is likely, though, that in the 1960s and at the outset of the program, North Karelian men smoked more than in the rest of the country. During the last few years of the program the North Karelian men smoked less than men in the rest of Finland for the first time. The length of the follow-up and the shape of the trend curve indicate that a permanent change has taken place, and is not a short-time campaign effect.

Separate studies have shown that the reduction in smoking and the effect of the program have not been associated with particular socioeconomic groups or initial risk level.[7,8] Thus, unlike the national development, smoking has declined in North Karelia at least as much in lower socioeconomic groups as among higher ones. This all indicates that the effect of the program has had a true community impact. Thus, in accordance with the original program objectives, it has been possible to introduce general lifestyle changes in the entire community.

Coronary heart disease rates started to decrease in North Karelia during the first five years of the project. The latest results show that during the period from 1974 to 1979 (when the impact of risk factor reduction could start to show) the reduction in age-standardized male CHD mortality was 22% in North Karelia, 12% in the reference area, and 11% in the whole country, excluding North Karelia. Thus the reduction in coronary mortality among North Karelian men has not only been substantial but is also double that in the reference area and the rest of the country.

It not possible to state which factors of the intervention package have caused the reduced disease rates. However, since the greatest changes occurred in smoking, the finding supports the hypothesis that clear reduction in smoking rates can indeed lead to reduced coronary mortality rates in the community. In the future changes in cancer rates will also be assessed. So far this has not been meaningful, because of the much smaller number of cancer deaths compared with those of heart disease. But during the first five-year period it was found that changes in cough symptom prevalence in certain subgroups were associated with respective changes in smoking rates.[9]

Before 1977 it was the policy of the project not to promote respective changes in the reference area or nationally. However, during this period the project had much positive national publicity. And because of the encouraging results already during the first five-year period, by 1977 the project team had to be involved in national applications. The project experiences were considered by a government health education committee that recommended intensified national health education activities, including establishment of a new office for health education in the National Board of Health. The project health education materials have been prepared and distributed nationwide. A major national activity has been a series of health education programs on Finnish television carried out by the project since 1978. Evaluation of these activities in the whole country and in North Karelia has shown a direct and indirect impact of these programs.[10,11]

A major national action to fight smoking was the introduction of the antismoking legislation in 1977. Among other things, the North Karelian experience was used to justify the legislation. The central issues in the law are the following:

- prohibition of all tobacco advertising in the country
- maximum levels of the harmful substances in the smoke of the tobacco products
- labelling and health warnings on the packages
- prohibition of selling tobacco to anybody under 16 years of age
- smoking prohibition in public indoor places where children have free access
- responsibility for health authorities to carry out and coordinate antismoking activities
- 0.5% of tobacco tax income goes for antismoking education and research.

Attention has also been paid to the tobacco price policy. Although several price increases have occurred for health reasons, the real prices of tobacco products decreased from 1965 to 1975. Thereafter a slight increase has taken place.[12] The number of Finnish men who smoke has declined since the 1960s, a decline most pronounced in North Karelia. Sales statistics show that the national tobacco sales started to decrease only after 1975.[12] Associated with the reduction in national smoking rates is a favorable development concerning cardiovascular disease in the country. The coronary heart disease mortality of Finnish men, which used to be highest in the world, has decreased nationwide (although the decline in North Karelia has been greater).

Based on our results and experiences, we feel that a determined and comprehensive national policy can reduce smoking rates. The extensive pilot program in North Karelia has demonstrated that a well-conceived, systematic, and intensive community-based program can be effective in reducing smoking and other risk factors and that this development indeed leads to reduced disease rates. Furthermore, use of such a major pilot program can have a favorable influence on national development of a program through providing tested field methods, demonstration, training, and a visible national example.

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Medical associations step up activities to counter smoking

In June 1983, the Editor wrote to the secretaries-general of medical associations in 45 countries to solicit commentaries on each association's effort to combat the promotion and use of cigarettes. Nine associations replied, seven of whose commentaries appear in this section. Although expressing support for this issue of the Journal, *the secretaries-general in France and Hong Kong were unable to prepare commentaries in time for publication.*

The British Medical Association and smoking

The British Medical Association (BMA) is committed to the eradication of smoking both by challenging the public's attitude through health education programs and by calling for more strict controls on the advertisement and sale of tobacco products.

The BMA's policy is derived from a statement on smoking adopted in 1971 which said that smoking plays a major part in development of many diseases, causes physical disability, and increases mortality from vascular and respiratory causes. A survey published in June 1983 by the UK Office of Population, Censuses and Surveys shows that smokers are now in a minority in every social group and that since 1980 there has been a drop in the number of smokers in every age group except for women aged between 20 and 24 where the number is said to be the same. We believe that smoking is no longer socially acceptable and therefore it is made much harder to smoke in public places. Cinemas, theaters, and some restaurants have restrictions on smoking.

The BMA's existing policy is to ban advertisements of tobacco products except at point of sale. As the audience reached by cigarette advertising has been progressively eroded by restrictions on the type of advertisement and by the imposition of government health warnings on cigarette packets, so the tobacco industry has increased its efforts in the overt sponsorship of sporting and cultural events. Despite this, the BMA is concerned that government health warnings are not as clear as they are in certain other countries. The tobacco industry's sponsorship of sporting and cultural events is a major cause for concern as it fosters a long-term financial dependence on the tobacco industry, legitimizes the industry's role in society, and enhances its prestige. The "image" created by the tobacco industry's association with sporting events is particularly powerful among young people. Lately, the industry has diversified into the field of sponsoring holiday tour operators. The voluntary agreements between the government and the tobacco industry which are supposed to control the advertising of cigarettes and the sponsorship of sport do not go far enough. They are easily broken as shown by the fact that for the last two years a player* sponsored by British American Tobacco has worn a tennis dress bearing the distinctive house colors of a certain brand of cigarette during televised matches from the Wimbledon Lawn Tennis Championships. This happened again in 1983 despite the apologies made and the assurances received from British American Tobacco after a similar infringement in 1982. The BMA will continue to press for stricter controls on the sponsorship of sporting and cultural events.

Although the Association has concentrated on reducing advertisements and sponsorship, it has also been active in other areas. In our evidence to the Royal Commission on the National Health Service in 1977 (*Br Med J* 1977;1:299) we stated that

> the encouragement of a non-smoking community is probably the single most urgent task now facing preventative medicine and the community which it serves. All the conditions in which cigarette smoking is implicated cost the National Health Service a vast amount of money to investigate and treat, not to mention the cost to the exchequer in sickness pay and pensions. It is, in fact, estimated that the total care of smoking-related disease costs far more than the revenue collected from the tobacco tax. From the medical point of view, a severely differential tax between cigarettes on the one hand, and cigars and pipe tobacco on the other, would encourage a reduction in cigarette smoking and so reduce the incidence of lung cancer as well as coronary arterial disease, strokes and bronchitis.

Since that date we have continued to urge the government to increase the excise duty on cigarettes.

The Association has always worked in conjunction with the Medical Royal Colleges and Faculties and bodies such as Action on Smoking and Health and the Health Education Council. Such unity is one of the major strengths of our campaign.

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* *The player is Martina Navratilova, and the cigarette brand is Kim.*

Germany: A bankrupt health policy toward smoking

The World Health Organization and five world conferences on smoking and health have left no doubt that more human lives could be saved and more disease prevented by a marked lowering of cigarette consumption than by any other single measure. In Germany (population 61,000,000), the government has estimated the number of German citizens who die prematurely each year because of smoking at 140,000 (Federal Parliament document 7/2070).

Forty percent of all cancer conditions in men could also be avoided by not smoking (press release, Federal Minister for Health and Family Affairs 38/

39—1978). Bronchial carcinoma, which is the most frequent form of cancer (amounting to almost 30% of all male cancer deaths), has reached a new record in Germany with around 27,000 deaths.

Virtually nothing has been done in Germany to tackle this problem so far. Although the federal government has declared smoking as "absolutely damaging to health," an unparalleled advertising expenditure for the toxic products of the cigarette industry is tolerated in clear contravention of the constitutional stipulation that harm to the German people is to be avoided. In 1982, a depressing balance was drawn up at Germany's second government-sponsored cancer conference: although smoking is the most important single cause of cancer, and our health ministry has declared 40% of all new cancers in men as avoidable by not smoking, the topic of smoking was not once placed on the agenda at the numerous sessions in the context of the overall program of cancer control of the federal government. In the 46-page intermediate report from 1979 to 1982, the term "smoking" is completely absent. Of the 44 points of the resolution of the second great cancer conference, not a single point was devoted to smoking! In the meantime, a "working group on smoking" has been formed, which includes several lobbyists of the cigarette industry.

Thus, we have a similar situation in Germany to that in the United States. Just as President Carter dismissed HEW

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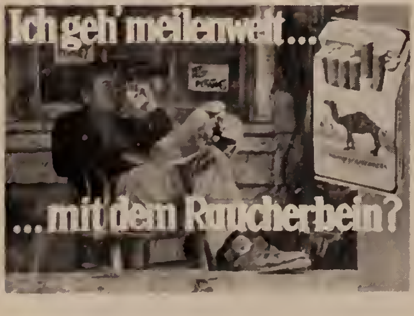
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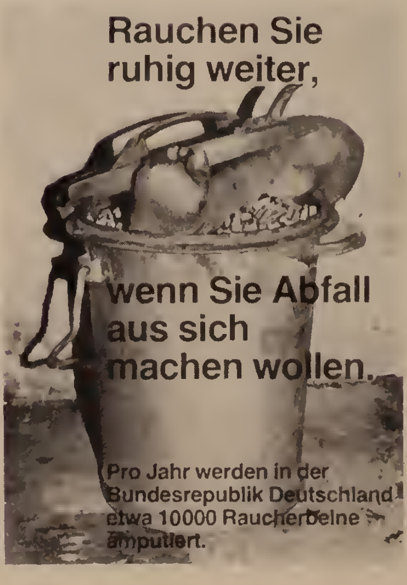

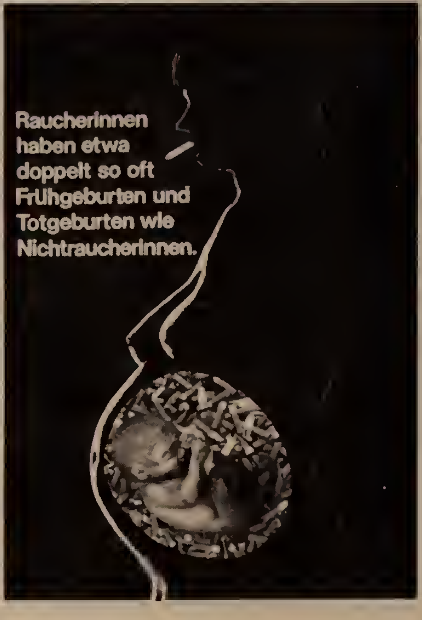

The four German cigarette advertisements for HB, Kim, Camel, and Peter Stuyvesant promise vigor, excitement, fashion, and pleasure. The three German counter-advertisements tell a different story, alluding to stillborn and premature infants of mothers who smoke and the 10,000 limbs amputated in Germany every year due to smoking-related vascular disease. Above: "I'd walk a mile . . . with a smoker's foot?"

Secretary Califano in order to secure the votes of the tobacco farmers, our Federal Labor Ministry, under the pressure of the tobacco industry, withdrew the draft of a new industrial safety law, containing far-reaching protection of nonsmokers at the workplace. Unfortunately, the horizons of our politicians only extend as far as the next election. Advances in the sector of nonsmoker protection in Germany have not been achieved by measures, but rather by legal proceedings. Although the toleration of public advertising for the toxic products of the tobacco industry is not compatible with the oaths of office of our politicians to serve the wellbeing of the people, the advertising expenditure in Germany, as in the United States, reached a new record in 1982. For advocates of consumer protection, there is a worthwhile field of activity ahead in the sector of smoking.

Twenty years after the US Surgeon General's report, the problem of smoking is still unsolved, although it has been known for a long time what should be done, and although the Scandinavian countries have set a good example. Thus, it is by no means an exaggeration to speak of a bankruptcy declaration of Germany's health policy in the sector of smoking. Since the concern for public health is obviously thought less important than are special interest considerations, it is, in my opinion, high time that our politicians are reminded of their official obligations—by legal proceedings, if necessary.

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Norway: a pioneer effort to curb smoking

In 1967, a Norwegian Committee appointed to study smoking habits in Norway (population 4.1 million) concluded that the following practical measures should be implemented or developed in the work to combat the harmful effects of tobacco:

Educational measures. An educational program for school children and young people, physicians and other health personnel, teachers, youth leaders, and parents of children of compulsory school age.

Restrictive measures. Restrictions on advertising; labeling of cigarette packages; changes in taxation on tobacco; restrictions against smoking in public transport.

Therapeutic measures. The expansion of tobacco-weaning clinics and courses.

In 1971 the government appointed a multi-discipline council—the National Council on Smoking and Health—and made it responsible for activities directed against tobacco smoking. The Council was also given the status of an advisory body to the Ministry of Health and Social Affairs in all matters relating to smoking and health, and antismoking activities. Since 1974, the Council has had its own budget and secretariat (in 1982, US $286,000 and five permanent positions).

The three-stage strategy mentioned here has been the basis for the Council in its work against smoking. It has prepared and published general teaching material containing information about the health hazards of smoking, and special material adapted to central target groups (physicians and other health personnel, teachers, women, children). The Council has arranged for and evaluated campaigns in the mass media, as well as in schools, etc.

Each year since 1973 the Council has carried out surveys on smoking to follow trends in smoking habits in the Norwegian population, as well as several surveys among professional groups concerned with health education.

In 1973 the Storting (the Norwegian Parliament) passed an Act banning all kinds of advertising and promotion of tobacco products. The regulations issued in accordance with the Act require cigarette and tobacco packets to be marked with health hazard warnings (also, from 1984, declarations of the content of nicotine, tar, and carbon monoxide). The Act, which has on the whole been accepted by the industry, shopkeepers, and the public has been an instrument working along with the other measures included in the program. (In 1981, the Norwegian Medical Association urged the Norwegian Government to work for a tobacco-free society by the year 2000.)

In 1973, 51% of men in the 16- to 74-year age group smoked daily; in 1982 only 40%. The corresponding figures for women were 32% and 34%. Women's smoking habits have changed very little over these 10 years, with 30% as the minimum and 34% as the maximum figure.

The per capita consumption of cigarettes (manufactured and hand rolled) increased up to 1969-1970. From 1970 onward, there has been a new trend, with only a very small change in annual sales. The leveling out occurred simultaneously with the start of the government's measures against smoking. Since 1981 there have been significant reductions in cigarette sales.

If the increase in the sales figures during the 1950s and 1960s had continued up to today, this would have led to a total tobacco consumption approximately 23% higher than the present level. Among men there is no significant trend toward increased daily consumption. Women's consumption has increased from about 10 cigarettes a day in 1973 to about 11 in 1982.

In the period 1975 to 1982 the Council has carried out several studies on smoking habits among children and adolescents. The percentage of daily smokers has for both boys and girls 13 to 15 years decreased in the period 1975 to 1982, especially among girls. Surveys among persons aged 16 to 20 years show that the reduction continues.

The positive figures for the changes in smoking habits among 2,100 pupils in the 9th grade (15 years old) in 30 schools, which can be followed through surveys in 1975, 1980, and 1982, are:

Subjects	*1975*	*1980*	*1982*
Boys	21.8	18.3	16.5
Girls	28.3	23.5	22.5

Teaching material and school programs on smoking and health have been developed and evaluated. Today extensive material of this kind is distributed to schools with pupils aged 12 to 16 years.

The greatest challenge for future activities will be to strengthen the positive development achieved so far. If the present trend of reduction in smoking among young people continues, it will gradually have a powerful impact on the smoking habits and the total tobacco consumption in the entire population. Yet in spite of the many positive signals from the various surveys, we cannot expect that smoking will be reduced without continued and improved information activities.

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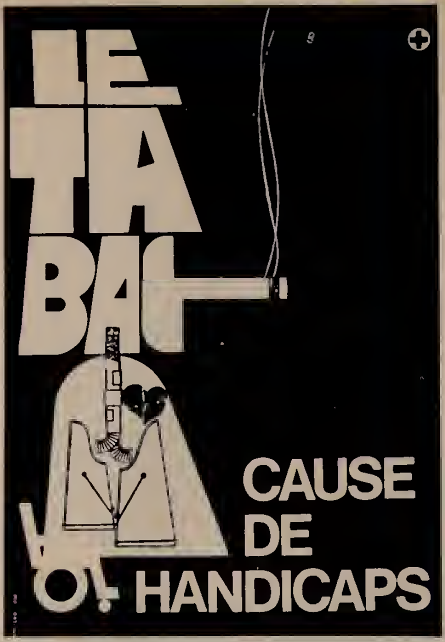
Belgium fights tobacco

In Belgium, the smoking population has declined in the past few years, but the number of young people who smoke remains very high (43% from ages 14 to 15, 62% from ages 16 to 18). The number of women and girls who smoke is actually increasing.

Belgium came late into the struggle against tobacco and still lags behind most other European countries. In 1971, a Royal Decree prohibited the addition to tobacco of substances able to increase its toxicity. A mild warning, "Cigarettes can be detrimental to your health," first appeared on cigarette packets in 1975. In 1977, the Ministry of Health launched a campaign against smoking, and a law concerning the protection and health of consumers forbade the use of tobacco in hospitals, some working places (such as those handling food stuffs or inflammable products), and most public venues. On April 25, 1979, there was a National Day Without Tobacco. Also in 1979, by Royal Decree the warning was strengthened to, "Tobacco is detrimental to your health," and limitations were placed on cigarette advertising.

Besides these official measures, various groups have been involved in efforts to curtail smoking, including the Antitobacco Association, the Belgian Red Cross, the Belgian Organization Against Cancer, and Belgian Heart League.

In 1983, the government initiated a three-year campaign aimed at 11 to 15 year olds, to be followed by another campaign for 15 to 24 year olds. The theme is "the picture of a nonsmoking star" and will involve stars of cinema and sports.



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South Africa: A stepped-up commitment

It is estimated that the economic consequences of smoking in South Africa account for one milliard rand per year (US $1 billion) and that more than 3,000 people die yearly as a result of illnesses incurred by smoking. In 1981 the Medical Association of South Africa (MASA) issued a statement on smoking on which all its subsequent actions and strategies have been based. "The MASA believes that the time has come when there can no longer be any equivocation about the ill effects—medical and social—resulting from smoking," the statement read. "In taking the standpoint the MASA is aware that it is incumbent upon it, as the representative body of the medical profession in South Africa, to offer guidance on this important question."

The MASA believes that the weight of scientific evidence linking cigarette smoking to the excessively high incidence of any serious diseases is beyond question. And the MASA believes that it should be made clear that attempts to dilute the scientific evidence by various groups verge on the immoral.

Only a concerted and wholehearted effort will break the hold that cigarette smoking has on South Africa's population as a whole. Such steps are vital if we are to prevent future generations from suffering a similar fate.

The MASA does not hesitate in calling for the following legislative action:

1. A total ban on all tobacco advertising in all media.
2. All purchases should bear a clear health warning insuring that the public is told that tobacco smoking is damaging to health.
3. A ban on all cigarette vending machines.
4. The removal of tobacco products from open display shelves in super markets.
5. The discontinuance of allowing tax relief on any form of tobacco promotion.
6. A ban on sales of cigarettes to minors, to be strictly enforced.
7. The maximum permitted nicotine and tar yield should be established by law and enforced.

Additionally, the MASA seeks the support of important influence groups:

Doctors and other health professionals to assist and encourage education campaigns promoted by various organizations including the Department of Health, Welfare, and Pension; to actively discourage patients from smoking; and to give up smoking themselves where they have not done so.

Department of Health and Welfare to set a target for reducing tobacco consumption by at least 3% per annum; to begin a major and continuous health education campaign against smoking among school children with the active participation of the teaching profession.

Sportsmen and entertainers to avoid being directly or indirectly involved in promoting smoking and never to be seen smoking in public.

Insurance companies to continue the trend toward offering reduced payments for those who do not smoke on life insurance policies, and to advertise this fact.

Industry and commerce to encourage nonsmoking in the workplace.

In 1982 the MASA worked in close cooperation with the Council on Smoking and Health to promote a National Smokeless Day. This year a Smokeless Week was held in November, and an increased involvement with youth was one of the main objectives. A regional branch of the MASA initiated a project, "Smokers Anonymous," among school children. The MASA's publications, the weekly *South African Medical Journal* and the quarterly *South African Medical News* (aimed at the public) have actively participated in the campaigns. Also in 1983 the MASA and the Council on Smoking had an interview with the Minister of Health and Welfare to discuss various strategies and to request active cooperation and financial support from the government and the private sector in the campaign against smoking. The Council on Smoking has also requested the Minister to include the word "nicotine" in the act on the abuse of dependence-producing substances.

C. E. M. VILJOEN, MB CHB
Secretary General
Medical Association of South Africa
PO Box 20272
Alkantrant Pretoria 0005

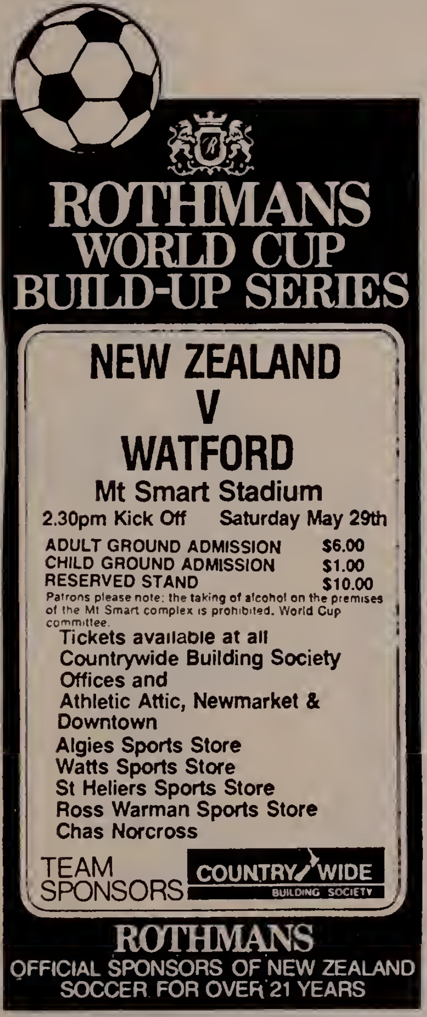
Cigarette smoking in New Zealand: a zealous effort

Prevention has been the major aim of campaigns to counter smoking in New Zealand. There has been an emphasis on programs in the schools and media to educate the young to the disadvantages and dangers of smoking, and to alter the image of smoking from "mature" and "sophisticated" to offensive and self-destructive. A media campaign has recently been initiated, directed specifically at young women. In New Zealand (population: 3.2 million), one in three persons smokes, and between the ages of 15 and 24 more New Zealand women than men now smoke. Public attention has been drawn to the disproportionate number of Maori and Pacific Islanders who smoke. Other programs have focused on the cessation of smoking during pregnancy and discouraging smoking in public places.

As a national organization representing 82% of the medical profession in New Zealand and as the only organization recognized by the Government to represent the profession as a whole, the New Zealand Medical Association (NZMA) has been directly involved in several aspects of the fight against smoking. The major groups conducting campaigns against smoking in New Zealand are the Cancer Society of New Zealand, the National Heart Foundation, and the Department of Health. The NZMA has given strong support to these bodies.

Since the early 1960s, the NZMA has called for a ban on all cigarette and tobacco advertising. In 1973 an informal agreement was reached between the government and the cigarette manufacturers prohibiting cigarette advertising on radio, television, and billboards and in cinemas. The NZMA has continued its demand for a complete ban on all cigarette and tobacco advertising, with particular concern at cigarette company sponsorship of sporting and cultural events.

The Association was involved in the establishment of the requirement that all cigarettes manufactured in New Zealand should bear a government health warning on the packet, stating that smoking may endanger your health. This measure was introduced in New Zealand in 1973.



ROTHMANS
WORLD CUP
BUILD-UP SERIES

NEW ZEALAND
V
WATFORD
Mt Smart Stadium
2.30pm Kick Off Saturday May 29th

ADULT GROUND ADMISSION $6.00
CHILD GROUND ADMISSION $1.00
RESERVED STAND $10.00

Patrons please note: the taking of alcohol on the premises of the Mt Smart complex is prohibited. World Cup committee.

Tickets available at all
Countrywide Building Society Offices and
Athletic Attic, Newmarket & Downtown
Algies Sports Store
Watts Sports Store
St Heliers Sports Store
Ross Warman Sports Store
Chas Norcross

TEAM SPONSORS COUNTRYWIDE BUILDING SOCIETY

ROTHMANS
OFFICIAL SPONSORS OF NEW ZEALAND SOCCER FOR OVER 21 YEARS

Cigarette-company-controlled sports in New Zealand. Can the Marlboro Super Bowl and Benson & Hedges 100s World Series be far behind?

The most recent proposal put forward by the NZMA is a request to government that taxes on cigarettes and alcohol be raised significantly, to act as some form of deterrent. The taxation raised would be targeted toward the government health budget to offset to some degree the massive costs to society resulting from illness caused by tobacco and alcohol consumption.

In recognition of the influential position of medical practitioners in the community as health care educators having immediate and day-to-day contact with members of the public, the NZMA has promoted the concept of the profession leading by example. The Association has urged all physicians not to smoke in their professional rooms and in hospitals. The NZMA has also recommended that the government request that smoking should be banned in all enclosed places.

KAREN MORRIS, BA Hons
Committee Secretary
General Practitioner Services
New Zealand Medical Association
PO Box 156, Wellington, New Zealand

A dilemma for the Philippines

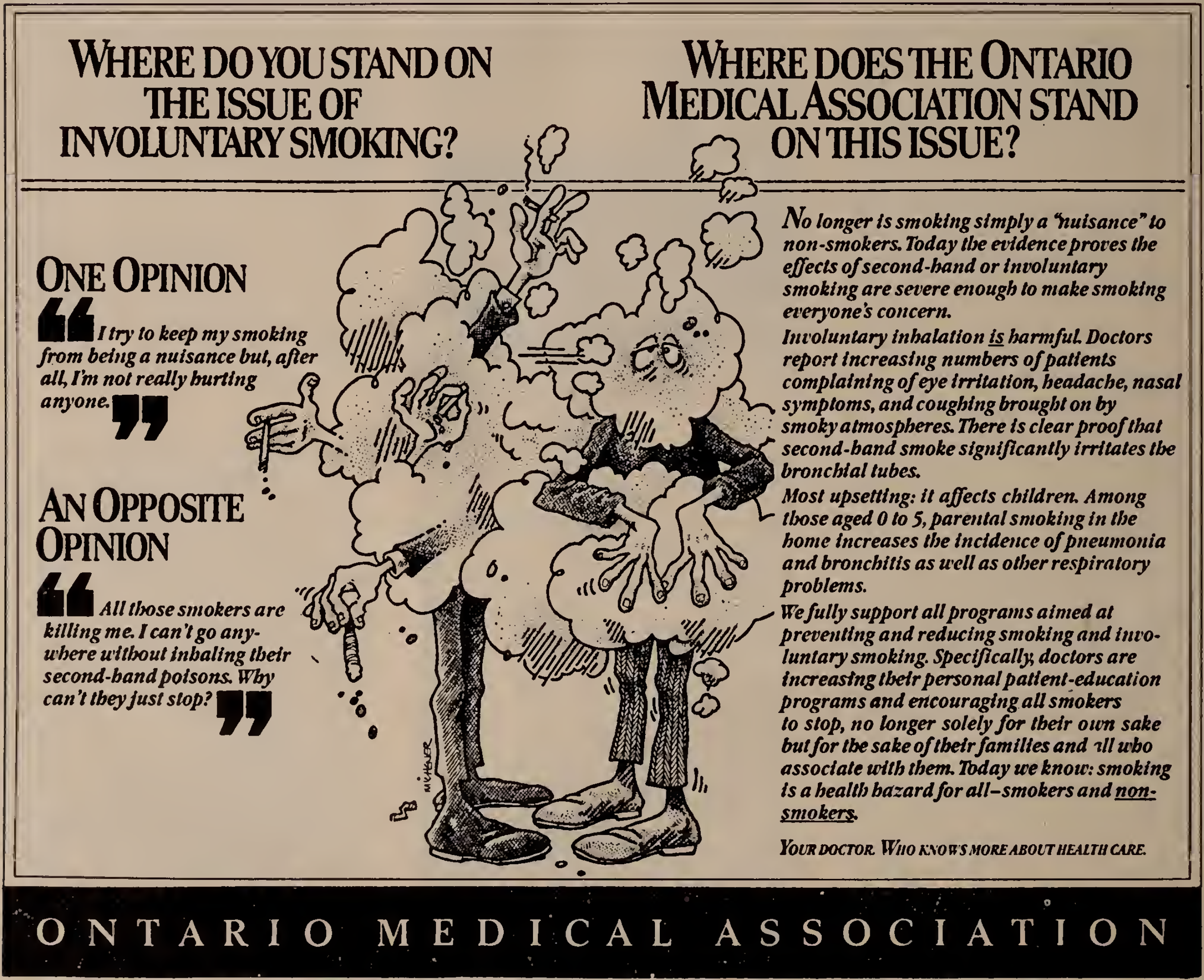
Tobacco is one of the major agricultural products of the Philippines, and a significant portion of the population depends on this industry for its livelihood. This may account for the absence of a strong effort to curtail smoking. This is not to suggest that an awareness of the ill-effects of smoking is nonexistent, but the measures taken are far short of those in many other countries.

For over a decade, there have been prohibitions against smoking in theaters and other public halls, and for a shorter period of time against smoking in public vehicles: these prohibitions are rigidly observed. Increasingly, there are offices, both private and public, in which smoking is prohibited. However, there are no restrictions against cigarette advertisements in any of the media, and advertising in newspapers and magazines as well as on television is heavy for some brands of cigarettes. There are radio spots against cigarette smoking aired as a public service, but no similar ads in the print media or on television.

Except for the Philippine Cancer Society and the Philippine Heart Association, the medical societies have been relatively silent regarding the issue. Inspired by the letter from the Editor of the *New York State Journal of Medicine*, the Philippine Medical Association Executive Council issued a public statement regarding cigarette smoking, and this has been given considerable publicity. It is hoped it will be possible to continue this effort in the coming months.

The statement recognizes the importance of the tobacco industry in this country, and suggests that government should initiate the efforts to encourage farmers to shift to other crops. However, this must be a governmental effort, even if pressure from interested groups may help in getting the government to act. This would not be viewed as a significant priority here today under the present economic and political circumstances, but continued efforts to bring the hazards of smoking to the public's attention may eventually produce results.

V. J. ROSALES, MD
President
Philippine Medical Association
P.O. Box 4039
Manila
The Philippines



WHERE DO YOU STAND ON THE ISSUE OF INVOLUNTARY SMOKING?

WHERE DOES THE ONTARIO MEDICAL ASSOCIATION STAND ON THIS ISSUE?

ONE OPINION

"*I try to keep my smoking from being a nuisance but, after all, I'm not really hurting anyone.*"

AN OPPOSITE OPINION

"*All those smokers are killing me. I can't go anywhere without inhaling their second-hand poisons. Why can't they just stop?*"

No longer is smoking simply a "nuisance" to non-smokers. Today the evidence proves the effects of second-hand or involuntary smoking are severe enough to make smoking everyone's concern.

Involuntary inhalation is harmful. Doctors report increasing numbers of patients complaining of eye irritation, headache, nasal symptoms, and coughing brought on by smoky atmospheres. There is clear proof that second-hand smoke significantly irritates the bronchial tubes.

Most upsetting: it affects children. Among those aged 0 to 5, parental smoking in the home increases the incidence of pneumonia and bronchitis as well as other respiratory problems.

We fully support all programs aimed at preventing and reducing smoking and involuntary smoking. Specifically, doctors are increasing their personal patient-education programs and encouraging all smokers to stop, no longer solely for their own sake but for the sake of their families and all who associate with them. Today we know: smoking is a health hazard for all—smokers and non-smokers.

YOUR DOCTOR. WHO KNOWS MORE ABOUT HEALTH CARE.

ONTARIO MEDICAL ASSOCIATION

The Ontario Medical Association may be the first medical society to have purchased advertising space in behalf of nonsmokers' rights. This half-page advertisement appeared in *The Globe and Mail* (Toronto) on April 4, 1983. The Association, through its committee on public health, is working with the Non-Smokers Rights Association and other groups to seek a ban on smoking in all Ontario hospitals. The *Canadian Medical Association Journal* and the *Canadian Family Physician* have published several cover stories in recent years on the importance of a nonsmoking environment in health care settings.

The spirit of Chadwick

LAWRENCE D. BUDNICK, MD

In 1982, *The Lancet* decried the pressure from the tobacco companies and their representatives in Parliament on successive governments and called for "a Chadwick . . . to bring home to the Government the results of its pusillanimous agreements with the tobacco companies."[1] Just as "a Chadwick" is needed in the United Kingdom, his inspiration is needed again in the United States to overcome the political interference with the government's disease prevention and health promotion activities.

Edwin Chadwick, born in 1800, initially was a student of law, but later studied under Jeremy Bentham and became a leading proponent of Philosophic Radicalism, or utilitarianism. His first paper, in 1828, described how the life span of the middle class had lengthened with their better surroundings. In 1832, he took his first government assignment, as an assistant on the Poor Law Commission, and, within six years, became secretary of the Commission. In 1842, the Commission issued its three-volume report to Parliament, but the summary volume, *Report on the Sanitary Condition of the Labouring Population of Great Britain*, was written solely by Chadwick.[2] It was the clearest description and analysis, and the most forceful presentation made to date of the insanitary conditions prevalent in England, of the sickness and poverty resulting from these conditions, and of the need for government-sponsored sanitary improvements.[3] As a result of this work, in 1843, a special Royal Commission on the Health of Towns was appointed; it included Chadwick and initiated projects for clean water supply and sanitary sewage disposal. In 1848, the Public Health Act was passed; this was the first time the government accepted some responsibility for the people's health, and, in 1849, a General Board of Health was appointed, with Chadwick as its chief executive officer.[2] After five years, the Board's legislative authority expired and was not renewed. Chadwick, although retired from government service, was still active in public health, and promoted what became the Sanitary Act of 1866. In addition, during all this time, he served as a model for public health reformers in the United States.[3-5]

Many authors attribute Parliament's refusal to reauthorize the General Board of Health in large part to difficulties with Chadwick.[3,6-8] Chadwick, however, thought the problem was more systemic; he discussed the demise of the Board in an address in 1878 to the Fifth International Congress of Hygiene of Paris,[9] and his comments reflect on some of the difficulties faced today by those interested in improving public health.

Although the Board took extraordinary sanitary measures during epidemics, such as ordering people to leave their houses and live in tents, Chadwick believed there was a "general popular acquiescence" because of "the pains taken to show that what [the Board was] doing was the best that could be done in their interest."[9]

The Board was not popular, "however, in the House of Commons, where there were strong manifestations of displeasure, expressed in terms of repugnance to encroachments on popular principles of 'local self-government'." He said, in addition, that many members of Parliament (MPs) placed self-interest above the needs of the people.

> Two of the opponents in Parliament were interested in a plan for an outlay of £40,000, which we had condemned. Other opponents were engineers, whose works and profits we had reduced considerably. One member, who owned a great manufactory of soap, from whence noxious smells were diffused amongst the population, told me distinctly, that if there was any interference with that manufacture, it would be the worse for me. But, the most powerful opponents were the directors and shareholders of the trading companies supplying gas and water to the metropolis, whose works we had examined, and proposed to supersede, and whose establishments we proposed to consolidate . . . . With the directors and shareholders of the water companies were allied the directors and shareholders of other companies, the wealthy engineers, interested in large works of the character interfered with, who raised a subscription, with which the Press was largely subsidised, to get up an agitation against the General Board. None of the moving sinister interests appeared on the surface, nothing but a patriotic concern for the large, general political interests of the community, which pretended concern or interest there was no one else there to challenge, but which the community did not support with petitions.[9]

In addition, other government officials who fought against the Board included the solicitor of the Treasury, who served as a water company director, and the Secretary of War and a number of MPs, who reportedly owned shares in the water companies.[1,10]

Chadwick concluded, "Altogether, a formidable phalanx was constituted, and by these opponents at a morning sitting, they effected a surprise, and by a vote which Lord Palmerston declared to be the 'foulest vote' which he had ever known in all his Parliamentary experience, they succeeded in putting the Government in a minority, on the

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question of the continuance of the Board of Health in that form." The Board was weakened for, among other changes, the Opposition substituted "for the permanent board of specialists, a board of changing political chiefs, of no special aptitudes." In fact, he stated that the Board had become "a great sham," and had "thrown back the progress of sanitation in England by a quarter of a century."[9]

Chadwick was a tireless and remarkable public health reformer. As *The Times* of London wrote in 1854:

> Future historians who want to know what a Commission, a Board whether working or Parliamentary, a Report, a Secretary of State or almost any other member of our system was in the nineteenth century, will find the name of Chadwick inextricably mixed up with his inquiries. Should he want to know what a job was in those days he will find a clue to his research in this ubiquitous name . . . Ask—Who did this? Who wrote that? Who made this index or that dietary? Who managed that appointment, or ordered that sewer, and the answer is the same—Mr. Edwin Chadwick."[11]

For over a century, he has been admired for his work, and for many years he has been considered one of the "fathers of modern public health."[3,4,6,11] Even his modern critics acknowledge that his efforts for the Public Health Act of 1848 and subsequent service with the first General Board of Health were laudatory.[8,10]

Chadwick was no more successful initially against the opponents of the first Board of Health than are modern public health workers against those who protect tobacco and alcohol companies, environmental polluters, and nuclear weapons producers today. Short-sighted and selfish industrialists and politicians interfered with the government's disease prevention and health promotion activities in Chadwick's time, just as they do now. The lesson we can learn from Chadwick, however, is that by persevering, public health workers can secure permanent public health reforms and improvements.

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PHLOGISTON THEORY REVISITED (1957)

On the floor of the Senate, Senator Maurine Neuberger, citing industry efforts to curb antismoking campaigns in the schools, said there was one theme that runs through all cigarette advertising: "Today's adolescents are tomorrow's addicts." Yet, she added, despite its "cynical manipulation of symbols in an effort to boost sales figures, some tobacco interests have the temerity to criticize efforts to present another view of cigarette smoking. One can almost picture the counterpart of these tobacco spokesmen at the time of Pasteur's discovery of the relationship between fermentation in liquids and the growth of bacteria, a discovery which resulted in the development of pasteurization of milk and is today regarded as a giant forward step in the battle to protect human health."

—SUSAN WAGNER
Cigarette Country–Tobacco in American History and Politics,
New York, Praeger, 1971, p 88.

When "More doctors smoked Camels": Cigarette advertising in the *Journal*

Even well into the twentieth century, cigarette smoking hadn't caught on among most men—and definitely not among women. But through mass media advertising and overseas tobacco funds for the boys at war, cigarettes became firmly entrenched by the 1920s. The tobacco companies were the first to offer women equal rights, of a sort, with slogans such as "I'm a Lucky girl," "Blow some my way," and "Do you inhale? Everybody's doing it!" Readers of the Sunday funnies were told by ballplayers like Lou Gherig and Joe DiMaggio, "They don't get your wind . . . So mild, athletes smoke as many as they please!" To respond to those nagging, fuddy-duddy health doubters, various salutary claims and endorsements by doctors of certain brands began to appear. By the 1930s cigarette advertisements had made their way into medical journals, including the New York State Journal of Medicine. *The following article was written by Alan Blum,* MD, *Editor, with extensive research assistance by Jessica Rosenberg, a medical student at New York University.*

In 1927 the American Tobacco Company began a new advertising campaign for the nation's leading cigarette brand, Lucky Strike, by claiming that 11,105 physicians endorsed Luckies as "less irritating to sensitive or tender throats than any other cigarettes." The reaction in the *New York State Journal of Medicine* was a swift denunciation from both a moral and a scientific standpoint by the Society's legal counsel, Lloyd Paul Stryker:

> In this present era of advertising and publicity . . . we are accustomed to see portrayals of dramatic critics, actors, and others smoking some particular brand of cigarette and certifying that there is nothing like it. The endorsers, we understand, are not infrequently remunerated.
>
> The propriety of this course on the part of those who furnish their endorsements, where such endorsers are members of the laity, is a matter falling within their liberty of choice, and is properly governed by their own sense of fitness of things. When, however, non-therapeutic agents such as cigarettes are advertised as having the recommendation of the medical profession, the public is thereby led to believe that some real scientific inquiry has been instituted, and that the endorsement is the result of painstaking and accurate inquiry as to the merits of the product.
>
> Despite the frequent attacks upon the medical profession, we believe that the people of this country, take them as a whole, have a regard and wholesome faith in their physicians. All that tends to the building up and strengthening of this faith redounds to the benefit of the medical profession and of its individual members, and that which in any wise tends to shake this faith and confidence works a detriment not only to the profession as a whole but to each individual practitioner. All that tends to strengthen the faith of the people in the belief that medical opinions are founded upon a sound scientific basis, should be fostered by the profession.[1]

Although Stryker could find no canon of the principles of professional conduct of MSSNY that such endorsements definitely violated, he questioned whether or not such involvement by physicians, albeit in this instance most likely unintentional, tends "to advance the science and honor of medicine and to guard and uphold its high standard of honor."

A few months later the *Journal* noted the praise by *California and Western Medicine* (among other journals) for Stryker's commentary:

> It is regrettable that any physicians should have thoughtlessly lent their support to this advertising scheme. The profession that has studiously worked to protect the people from fraudulent claims of drug advertisers should be more alert and discerning.[2]

In the same issue, the *Journal* published new Advertising Standards that declared, "The *Journal* will continue to select, to require proof, to reflect. And its advertising columns will prove increasingly valuable to the readers as a guide to reliability of firm and product." A subsequent editorial announced that advertisements would be edited as if they were scientific articles or news items, to "guard against extravagant statements."[3]

In spite of these assurances, and in the absence of an announcement of a modification of these standards, the *Journal* published its first cigarette advertisement in 1933. For more than 20 years it was to accept more than 600 pages of cigarette advertisements from the six major tobacco companies. Although it is difficult to understand how the *Journal* permitted cigarette advertising, there is no mystery whatsoever as to why tobacco companies sought out medical journals: in the words of an Irish proverb, "Truth may be good, but juxtaposition is better." The tobacco companies were buying complacency.

FULL-BODIED

The first tobacco company to purchase advertising space in the *Journal* was Liggett & Myers. From October 1, 1933, to July 1, 1938, an advertisement for Chesterfield cigarettes appeared in alternating issues, usually on the premium-space back cover. Although some advertisments suggested Chesterfields were healthful ("Just as pure as the water you drink . . . and practically untouched by human hands"—Dec 1, 1933), most were composed of a romantic young couple, a double-entendre catchphrase ("They satisfy!"), and the distinctive Chesterfield logo. The following dialogue was printed below a scene of two lovers snuggled in a one-horse sleigh (Aug 1, 1934):

> Woman: "I thank you—I thank you ever so much—but I couldn't even think about smoking a cigarette."
>
> Man: "Well, I understand, but they are so mild and taste so good that I thought you might not mind trying one while we are riding along out there."

Perhaps because Lucky Strikes were America's top-selling and most widely advertised brand by the 1930s, the American Tobacco Company may not have wanted to court additional undue medical skepticism concerning its various health-oriented slogans, including, "No throat irritation. No cough." Only one advertisement for Lucky Strike appears to have been published in the *Journal*. Headlined, "A Quarter Century of Research Relating to a Light Smoke," the advertisement discussed American's long-standing ef-

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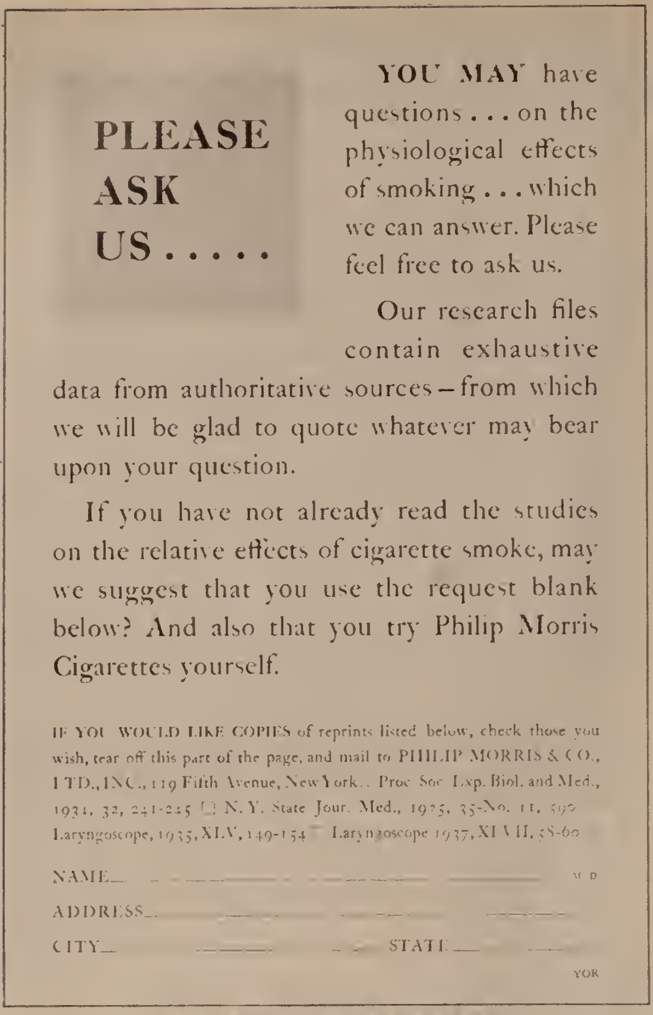
Address correspondence to Dr. Blum, Editor, *New York State Journal of Medicine*, 420 Lakeville Road, Lake Success, NY 11042.



PLEASE ASK US . . . . .

YOU MAY have questions . . . on the physiological effects of smoking . . . which we can answer. Please feel free to ask us.

Our research files contain exhaustive data from authoritative sources—from which we will be glad to quote whatever may bear upon your question.

If you have not already read the studies on the relative effects of cigarette smoke, may we suggest that you use the request blank below? And also that you try Philip Morris Cigarettes yourself.

IF YOU WOULD LIKE COPIES of reprints listed below, check those you wish, tear off this part of the page, and mail to PHILIP MORRIS & CO., LTD., INC., 119 Fifth Avenue, New York.. Proc Soc Exp. Biol. and Med., 1934, 32, 241-245 ☐ N. Y. State Jour. Med., 1935, 35-No. 11, 590 ☐ Laryngoscope, 1935, XLV, 149-154 ☐ Laryngoscope 1937, XLVII, 58-60 ☐

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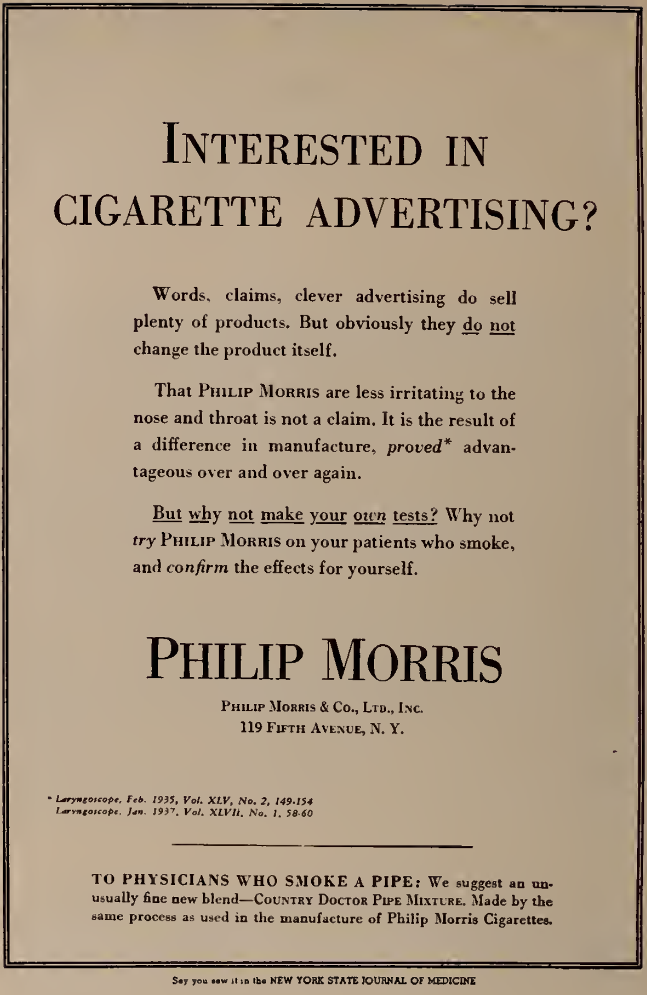
CITY__________ STATE__________

YOR

1938



INTERESTED IN CIGARETTE ADVERTISING?

Words, claims, clever advertising do sell plenty of products. But obviously they do not change the product itself.

That PHILIP MORRIS are less irritating to the nose and throat is not a claim. It is the result of a difference in manufacture, *proved** advantageous over and over again.

But why not make your *own* tests? Why not *try* PHILIP MORRIS on your patients who smoke, and *confirm* the effects for yourself.

PHILIP MORRIS

PHILIP MORRIS & CO., LTD., INC.
119 FIFTH AVENUE, N. Y.

* *Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154*
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60

TO PHYSICIANS WHO SMOKE A PIPE: We suggest an unusually fine new blend—COUNTRY DOCTOR PIPE MIXTURE. Made by the same process as used in the manufacture of Philip Morris Cigarettes.

Say you saw it in the NEW YORK STATE JOURNAL OF MEDICINE

1942

fort to solve "an extraordinarily complex problem":

> The objective may be stated as: *the perfection of a cigarette with a minimum of respiratory and systemic irritants, and with a fully preserved character, i.e., a perfected acid-alkaline balance—a cigarette in which rich, full-bodied tobaccos have been successfully utilized to produce "A Light Smoke."*

By means of a graph purportedly illustrating the ratio of total volatile acids to total volatile bases, the company claimed that, unlike Brands B, C, and D, Lucky Strike had struck the proper balance between "acidity and basicity." Why the advertising for this brand was discontinued is unclear, for there is no published correspondence or editorial content discussing the advertisement.

CLINICAL PROOF

Philip Morris English Blend cigarettes made their *Journal* debut in 1935, in single-column advertisements drawn to resemble a cigarette. Citing studies published in medical journals, these advertisements were the first to aim squarely at physicians. The basic claim was that Philip Morris, made with the hygroscopic (moistening) agent diethylene glycol, were less irritating than cigarettes made with glycerine or with no such chemical additive. The Philip Morris claim was largely based on an article published in the *New York State Journal of Medicine*.[4]

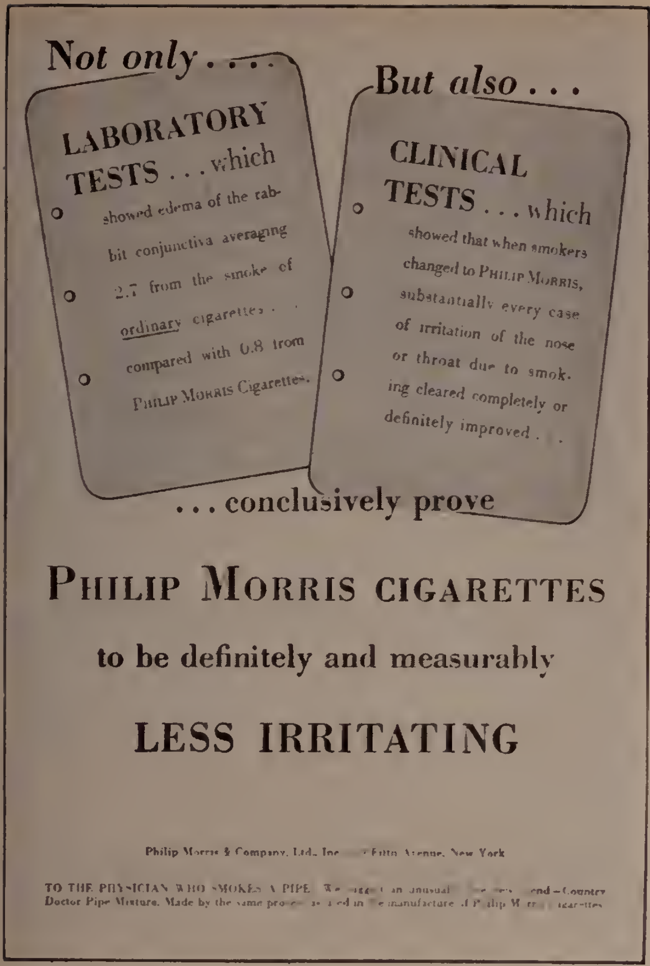
In the advertisements, reprints of this study and others in *The Laryngoscope* were offered, along with two free packs of Philip Morris. The study reported a variation of an objective technique for the measurement of irritation—the production of edema in the conjunctival sac of rabbits' eyes. In the authors' experiment, edema produced by the instillation of a smoke solution from Philip Morris cigarettes lasted an average of 8 minutes, while the smoke solution from "cigarettes made by the Ordinary Method" caused edema for an average duration of 45 minutes. The advertisements would note that an article in *Laryngoscope* (1935; XLV, No. 2, 149-154) reported "clinical confirmation. When *smokers* changed to Philip Morris, every case of irritation of the nose and throat due to smoking cleared completely or definitely improved" (eg, Dec 1, 1940).

For 15 years, Philip Morris continued to cite such "proof" for the health benefits of these cigarettes, notwithstanding the fact that the authors of the paper in the *Journal* had concluded that cigarette smoking, regardless of the brand, was the cause of irritation to begin with:

> For any one patient we may assume that cigarette smoke may play some part in the pathology of the throat condition for which he has consulted his physician.

In addition, in a subsequent article in the *Journal* criticizing the rabbit eye test as a means of evaluating irritation, Sharlit[5] had written

> . . . the olfactory nerve ends in the mucous membrane of the



Not only . . .

LABORATORY TESTS . . . which
- showed edema of the rabbit conjunctiva averaging
- 2.7 from the smoke of ordinary cigarettes -
- compared with 0.8 from Philip Morris Cigarettes.

But also . . .

CLINICAL TESTS . . . which
- showed that when smokers changed to Philip Morris,
- substantially every case of irritation of the nose
- or throat due to smoking cleared completely or definitely improved . . .

. . . conclusively prove

PHILIP MORRIS CIGARETTES

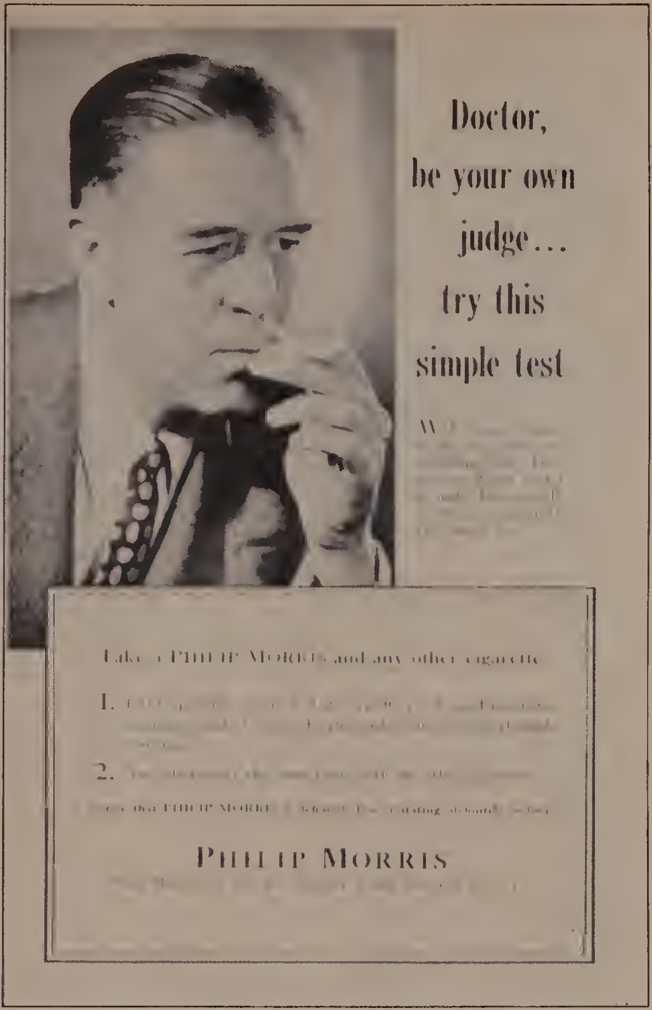
to be definitely and measurably

LESS IRRITATING

Philip Morris & Company, Ltd., Inc., [illegible] Fifth Avenue, New York

TO THE PHYSICIAN WHO SMOKES A PIPE. We suggest an unusual [illegible] blend—Country Doctor Pipe Mixture. Made by the same process as used in the manufacture of Philip Morris cigarettes.

1945



Doctor,
be your own
judge . . .
try this
simple test

Take a PHILIP MORRIS and any other cigarette

1. [illegible]

2. [illegible]

[illegible]

PHILIP MORRIS

1952

nose are far more efficient than the eye for detecting irritating smoke. Indeed, that is precisely part of the job of these nerve ends. When cigarettes made with diethylene glycol (ie, Philip Morris) were so tested by the writer and several others (smoke quickly drawn up through the nose), they were found, unfortunately, to be quite as irritating as other cigarettes.

Doubtless as the result of this article, Philip Morris issued a retraction of sorts which was published in the issue of Jan 15, 1943:

> A DISCLAIMER:
>
> Philip Morris & Company do not claim that Philip Morris cigarettes cure irritation. But they do say that an ingredient—glycerine—a source of irritation in other cigarettes, is not used in the manufacture of Philip Morris.

This did not stop Philip Morris from developing advertising themes throughout the 1940s such as "Why many leading nose and throat specialists suggest . . . change to Philip Morris" (1948–1949) or from boasting about the integrity of its advertising:

> INTERESTED IN CIGARETTE ADVERTISING?
>
> Claims, words, clever advertising slogans do sell plenty of products. But obviously they do not change the product itself. That Philip Morris are less irritating to the nose and throat is not merely a claim. It is the result of a manufacturing difference *proved* advantageous over and over again (Nov 1, 1945).

Although little Johnny the bellhop appeared each evening on such popular radio programs as "The Edgar Bergen and Charlie McCarthy Show," his smiling face never appeared in the *Journal*. Nonetheless, Johnny was enlisted in printed advertisements in the mass media to promote the theme of Philip Morris' "definitely less irritating" properties. Among the slogans he was shown calling out were, "Don't let inhaling worry you (if you switch to Philip Morris)!" and "An ounce of prevention is worth a pound of cure." Philip Morris never explained why Johnny's growth was stunted.

SLOW BURN

R.J. Reynolds first advertised in the *Journal* in 1941. Advertisements for Camels appeared in every issue for the rest of the decade, and in every other issue from 1950 to 1953. The early advertisements claimed that Camels, "the slower burning cigarette," produced less nicotine in the smoke. Photographs of men in white laboratory coats peering into test tubes lent a scientific touch. Like Philip Morris, R.J. Reynolds suggested switching brands as the alternative to quitting smoking. Rather than emphasize the irritation issue, R.J. Reynolds chose to play on the use of cigarettes to relieve "the strain of current life," as illustrated in this advertisement from Nov 1, 1942:

> In these unsettled times, individuals may tend to display baffling, sub-clinical symptoms. The relationship of these symptoms to smoking and nicotine absorption can be an interesting subject for exploration.
>
> However, the success of the physician's program is dependent upon the patient's full cooperation.
>
> Your recommendation of Camel cigarettes can be an aid in this direction. . . .
>
> Given adequate support by patients, the physician may find case histories more reliable. In addition, the segregation of such data may facilitate valuable group analyses.

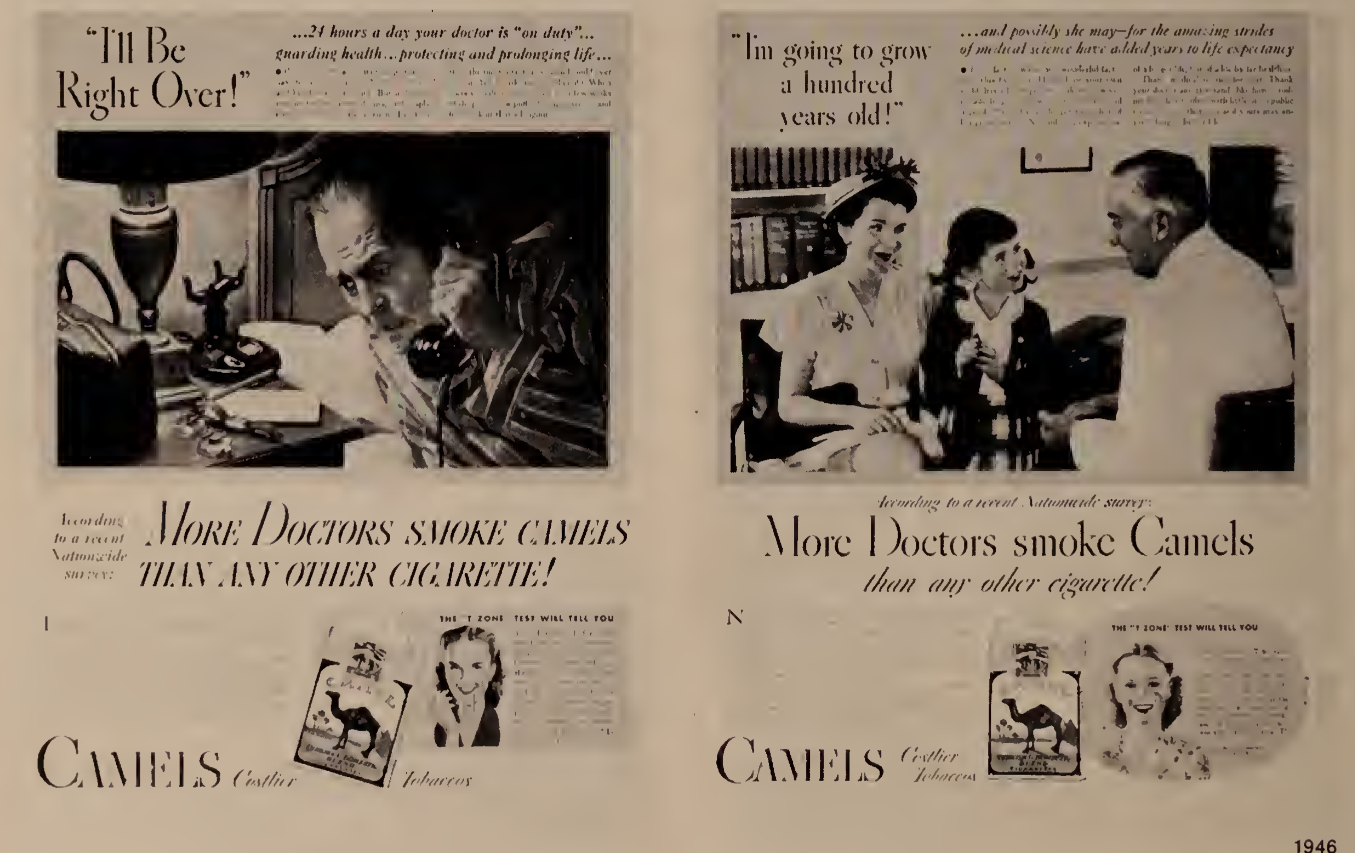
Although American Tobacco was first to exploit a patriotic wartime theme ("Lucky Strike Green has gone to war"), R.J. Reynolds quickly followed suit by portraying Camels "as the favorite of the armed forces" (Feb 1, 1943) and appealing to physicians to send a carton to their "friends with the fighting forces." Military physicians became "heroes in white" (Mar 1, 1945), whose only rare comfort was a trusty Camel.

Following a series of postwar advertisements praising America's fighting, smoking physicians, R.J. Reynolds introduced a campaign, based on a survey of 113,597 physicians, that claimed, "More Doctors smoke Camels than any other cigarette." The first advertisement in the series (Jan 1, 1946) included a reprint of a "Dear Doctor" letter from the Camel Medical Relations Division, One Pershing Square, New York, NY, which praised its own survey. The "More Doctors smoke Camels" theme could be heard on most prime-time radio programs, including such children's favorites as "Abbott and Costello." Advertisements nearly identical to those that appeared in medical journals also ran each week in the three most popular magazines of the era, *LIFE*, *TIME*, and *The Saturday Evening Post*, thus assuring maximum media saturation.

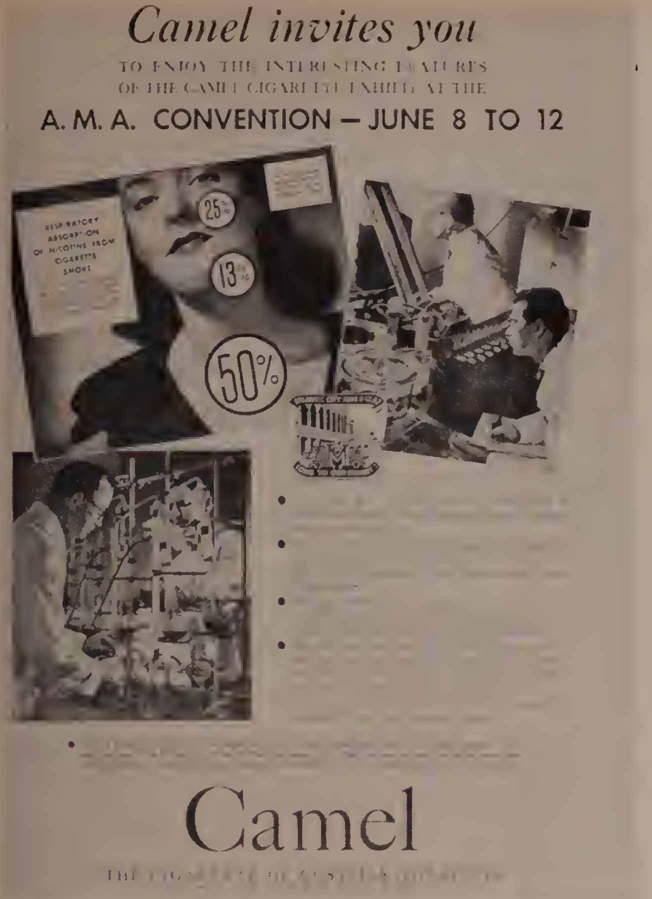
But R.J. Reynolds managed to top this effort in its direct-to-physician advertising with a campaign for Camels cigarettes that posthumously honored great medical discoverers: Thomas Addison, John William Ballantyne, Sir Charles Bell, John Hughes Bennett, Claude Bernard, Richard Bright, Charles Edoard Brown-Séquard, Paul Ehrlich, Carlos Finlay, Camillo Golgi, William Whithey Gull, Marshall Hall, Herman von Helmholtz, F.G. Jacob Henle, Robert Koch, Joseph Lister, Theobold Smith, William Stokes, Rudolph Virchow, and William Henry Welch. Advertisements in nearly every issue of the *Journal* in 1947 and 1948 praised the perseverence of these men, beneath the headlined slogan, "Experience is the Best Teacher." The advertisments concluded with the line, "Experience is the best teacher in cigarettes too!" and cited statistical proof that Camels were the "choice of experience."

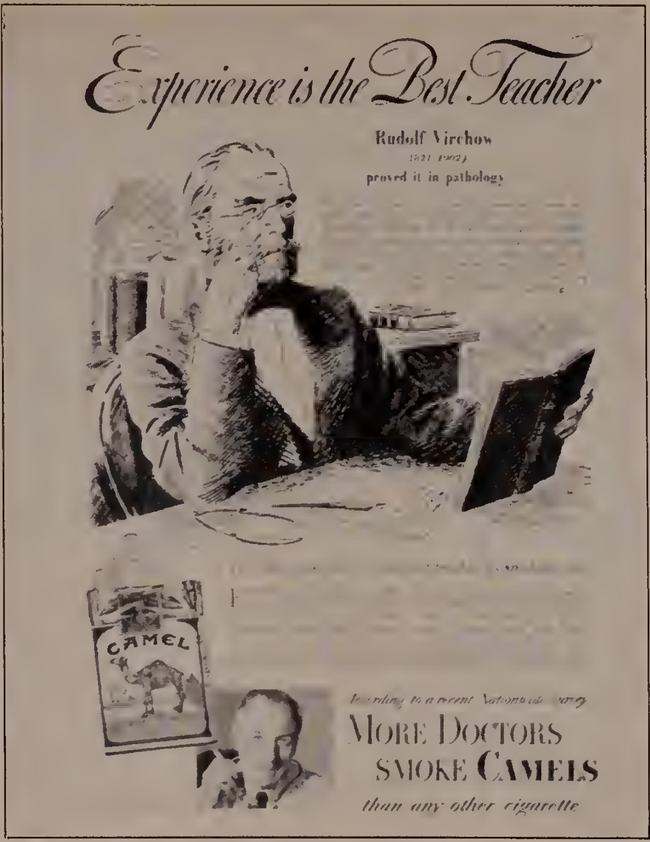
HOUSECALLS

Another way tobacco companies played up to physicians was to provide them with free cartons of cigarettes. This was done either by mail (as part of market research surveys) or by an attractive "detail woman" (who would see to it that a plentiful supply of cigarettes was available in the patients' waiting area) or by exhibits at medical meetings. In 1940 Philip Morris took out space in the *Journal* for an "invitation" to physicians to drop by the cigarette company's booth at the annual convention of the Medical Society of the State of New York. Beginning in 1942, R.J. Reynolds invited physicians to visit the Camel cigarette exhibit at the convention of the American Medical Association (AMA). This


"I'll Be Right Over!"
...24 hours a day your doctor is "on duty"... guarding health...protecting and prolonging life...
According to a recent Nationwide survey:
MORE DOCTORS SMOKE CAMELS THAN ANY OTHER CIGARETTE!
THE "T ZONE" TEST WILL TELL YOU
CAMELS Costlier Tobaccos
"I'm going to grow a hundred years old!"
...and possibly she may—for the amazing strides of medical science have added years to life expectancy
According to a recent Nationwide survey:
More Doctors smoke Camels than any other cigarette!
THE "T ZONE" TEST WILL TELL YOU
CAMELS Costlier Tobaccos

1946


Camel invites you
TO ENJOY THE INTERESTING FEATURES
OF THE CAMEL CIGARETTE EXHIBIT AT THE
A. M. A. CONVENTION – JUNE 8 TO 12
RESPIRATORY ABSORPTION OF NICOTINE FROM CIGARETTE SMOKE
25%
13%
50%
Camel



1947

advertisement was not unlike a circus poster:

> See for the first time the dramatic visualization of nicotine absorption from cigarette smoke in the human respiratory tract.
>
> See the giant photo-murals of Camel laboratory research experiments . . . .

In 1949 Reynolds concocted the "30-day test," whereby unnamed but "noted throat specialists" were used to back up the claim, "Not one case of throat irritation due to smoking Camels!" Philip Morris countered with the "nose test," which it urged physicians to try (Mar 1, 1950). In before-and-after pictures, a young woman was shown exhaling smoke through her nostrils—smiling in the photograph labeled "Philip Morris" and grimacing with her "present brand." The advertisement claimed the doctor-smoker would also "see at once Philip Morris are less irritating."

By 1950, Philip Morris had found a new lure: "Make our doctors' lounge your club," invited one advertisement (June 1, 1950). Brown & Williamson Tobacco Company, trying to attract frightened consumers to filter cigarettes, also worked the medical market. One of its advertisements thanked "the 64,985 doctors who visited Viceroy exhibits at medical conventions" (June 1, 1954).

OUT WITH THE BAD AIR . . .

Even though the cigarette companies have never publicly acknowledged any lasting harm attributed to their product, they have always attempted to portray various brands as safer and healthier than others. No aspect is more central to the hoax of safer smoking than is the filter. The first advertisement carried by the *Journal* for a filter cigarette was for Viceroy (July 15, 1939): "AT LAST . . . a cigarette that filters each puff clean!" ("No more tobacco in mouth or teeth . . . A note on your office stationery will bring two packages with our compliments.")

By 1953, following publication of several major studies that left little doubt about cigarette smoking's role as the primary factor in the growing epidemic of lung cancer among men, nearly all the remaining cigarette advertisements in the *Journal* and other medical publications were for filter cigarettes. The drop-off in cigarette advertising in the *Journal* did not merely come about because the companies' ability to deceive or confuse physicians had run its course. Rather, television had become the predominant medium, and the bulk of advertising budgets was shifted into the sponsorship of the most popular programs.

Philip Morris ran its last advertisement in the *Journal* on August 1, 1953; Reynolds exited at the end of 1953, but not before touting a new slogan, "Progress through research." Meanwhile, Lorillard had launched nationally televised "scientific" demonstrations to show the efficacy and implicit medical benefits of its Micronite filter. This campaign was backed up by a heavy dose of advertising in medical publications.

Although the advertisements never disclosed the composition of "Micronite," there is evidence that the material that Lorillard touted as "so safe, so effective it has been selected to help filter the air in hospital operating rooms" (May 15, 1954) and "to purify the air in atomic energy plants of microscopic impurities" (Feb 15, 1954) was asbestos. A case report from the Thoracic Services of Boston University Medical School, "Asbestos following brief exposure in cigarette filter manufacture," described a 47-year old man who had been exposed to asbestos dust for a period of nine months in 1953 while working in a factory that manufactured filters containing asbestos.[6] The patient made cigarette filters that consisted of a mixture of Cape Blue asbestos and acetate. According to the second author and a second source,[7] the filters were made for Lorillard, although it is possible that these particular filters were in some way different from the Kent Micronite filters.

Brown & Williamson again drew *Journal* readers' attention to the alleged lower tar and nicotine content of Viceroy, "as proved by testing methods acceptable to the United States Government." (Nov 15, 1953). The last cigarette advertisement appeared in the *New York State Journal of Medicine* on January 15, 1955, paid for by Lorillard to proclaim, "Old Gold—the first famous name brand to give you a filter." This from a company that had advertised Old Gold with the slogan "not a cough in a carload" in the 1930s and 1940s and had ridiculed the early medical reports pointing to the lethal side-effects of smoking with the slogan (also appearing in medical journals), "For a treat instead of a treatment."

Little if any criticism of the policy of accepting cigarette advertising appears to have been published in the *Journal* during the 20 years these advertisements ran. The same is true of *JAMA*, which published cigarette advertising between 1933 and 1953. But in 1954 a campaign for Kent, which implied an endorsement by the medical profession (merely because the manufacturer had also taken out advertisements in medical journals), incurred the wrath of an editorialist at *JAMA*, who denounced the advertising as "an outrageous example of commercial exploitation of the American medical profession and a reprehensible instance of hucksterism."[8] In a subsequent letter to *JAMA* Irving S. Wright, MD,[9] added that not only were the Kent advertisements misleading (which implied Kents were the choice for persons with vascular disease) but also especially dangerous. Wright described a patient with quiescent thromboangiitis obliterans who suffered a recurrence after having read a Kent advertisement that led him to resume smoking.

Thirty years after cigarette advertisements disappeared from peer-reviewed medical journals, it seems inconceivable that they ever could have been accepted in the first place. Yet many of the throw-away medical magazines continued to accept cigarette advertising throughout the 1960s and 1970s. At least one medical magazine, *Physician East*, which lists six physicians on its masthead and is published in Boston, has been running cigarette advertising in 1983. Others, including *JAMA*, carry advertising for CNA Insurance Company, a division of Loews.

COMMENT

Many goods and services offered in the *Journal* in the past half-century have stood the test of time, but a policy of accepting advertisements for cigarettes is a sad saga for this and all other medical publications that have carried them—and for the entire advertising and publishing fields. It may be too late to publish corrective advertising for promotions that ceased 30 years ago, but even in retrospect the credibility of the publication is harmed. The knowledge and common sense about cigarette smoking *were* there—but so were the mass media to undermine knowledge and cultivate mass denial. One clear lesson is that physicians are not immune to propaganda. But the point of this article (and this entire issue) is that the situation in regard to the promotion of smoking is even more pernicious today. The old advertisements in the *Journal* may seem ridiculous in their images and claims, and we can rationalize that we no longer acquiesce in the sale of cigarettes in a medical context. But do we? Whenever we flip past the cigarette ad on the sports page of *The Times* or ignore the one on the billboard downtown or on the bus, subway, or taxi that drops the patient off at our offices, we as leaders in society are doing precisely what the cigarette advertisers want us to do: *not* become angry, but rather to become resigned or complacent. Advertising for a product is not solely designed to sell to potential or current users, but also to assure the complacency or tolerance of non-users.

A common attitude among physicians today is that smoking will gradually die out in the next few years and that the cigarette companies will leave cigarettes to diversify into other kinds of businesses. Unfortunately, this is not on the agenda for a single cigarette company, least of all those which are aiming at developing nations.

It is too simple—and naive—a matter to call for a total ban on cigarette advertising, as so many other medical editorialists have done. Even granting an unforeseen awakening by Congress and local governments to the need for such an action, to judge from the events in countries where there have been such prohibitions, the tobacco industry is adept at incorporating its brand names, images, and packaging colors into other media. At LaGuardia and Kennedy international airports, for instance, the red rectangular symbol with the white triangular cut into it does not require a printed message for it to be instantaneously recognized that Marlboro cigarettes are being advertised. The clear solution is to remove all economic incentives for the cigarette companies and their subsidiaries, and the first step may well be a physician-led selective economic boycott. At the rate these conglomerates are growing, if the medical profession misses out on this opportunity, it may one day find itself working for health maintenance organizations operated by Loews, hospitals run by Philip Morris, trauma centers controlled by R.J. Reynolds, outpatient clinics established by Brown & Williamson, professional provider organizations set up by American Brands, and pharmaceutical manufacturers owned by Liggett. To judge from the increasing number of medical research councils, institutes, and science symposia underwritten by tobacco companies, and the medical schools and business schools accepting endowment money from them, this possibility may not be that far-fetched.

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Helping patients withdraw from smoking

GERALD P. MURPHY, MD, DSc, RUSSEL SCIANDRA, MA

Although all physicians agree that the elimination of cigarette smoking is an essential part of health promotion, most underestimate their ability to succeed in helping an individual patient to give up smoking. Wechsler et al[1] in a survey of 433 primary care physicians in Massachusetts, found that 90% routinely asked patients about smoking and that 58% were prepared to counsel patients about smoking. Only 3% expressed confidence that they were "very successful" with such counseling efforts.

But it appears that even brief but considered advice by the physician has been shown to have a significant success.[2] Indeed, Russell et al[3] point out that if all general practitioners in Great Britain were simply to remember to advise all patients not to smoke, more than half a million individuals a year would stop smoking.

Thus, the physician's pessimism about helping individual patients to give up smoking may be a case of viewing the glass as part empty rather than part full. While an individual physician may at first succeed with only a minority of patients, the number of those who still smoke is so large and the societal problems so great that even a small increase in the cessation rate can have an impact on public health.

While every patient who smokes should be viewed as a candidate for cessation, some patients are more resistant than others. An essential—indeed, mandatory—situation for a full-fledged effort to eliminate smoking is the pregnant woman seeking prenatal care. This includes a visit by a pregnant woman to an emergency room or other kinds of episodic care. Another situation in which a patient is more receptive to counseling is, regrettably, at the time of a severe illness. Pederson[2] has found that patients who have suffered a myocardial infarction are especially amenable to giving up cigarettes. Caution should be exercised in attempting to counsel patients who have severe depression or frank mental illness, but it is inappropriate to accept at face value "stress" as a reason for smoking or to avoid imparting advice because the patient is "too anxious." This can be misinterpreted by the patient as an endorsement of smoking as a means of therapy.

People who smoke are more mindful of the adverse health consequences when they visit a physician's office or other health care setting. Therefore, even the most routine consultation provides an opportunity for the physician to give advice on cessation. Because smoking hampers the management of some diseases it does not directly cause (eg, diabetes mellitus), the physician should not regard any patient who continues to smoke as "compliant," however well the patient adheres to other recommendations.

What is the best way to counsel patients? Although there are several factors in counseling which are constant in all patients, there is no single best way. The physician must clearly make known his strong feelings against smoking. Smoking should not be permitted by patients or staff in the office setting. Good health posters can reinforce this commitment.

The patient's expectation of success is the best predictor

Smoking Withdrawal Assistance

1. Helping Smokers Quit Kit
   A complete packet of materials designed specifically for physicians to assist their smoking patients to quit. Each kit contains enough materials for 50 patients. Write: Office of Cancer Communications, Box NY, National Cancer Institute, Bldg. 31, Room 10A18, Bethesda, MD 20205
2. Fresh Start
   Fresh Start is a four-session group clinic designed to help participants stop smoking by providing them with all the essential information and strategies needed to direct their own efforts at stopping. The program focuses on an active, pragmatic approach to quitting. Participants are encouraged to apply what they learn in Fresh Start to other aspects of their lives. *For a clinic schedule contact your local American Cancer Society Office.* The address of your local office may be obtained from the head office, The American Cancer Society, 777 Third Avenue, New York, NY 10017
3. Freedom From Smoking Kit
   Packed into two manuals, Freedom From Smoking is a potent self-help program that represents the culmination of four years of research, development, and evaluation. The first manual, Freedom From Smoking in 20 Days, provides a nuts-and-bolts, day-by-day approach to quitting. The second, A Lifetime of Freedom From Smoking, helps smokers reinforce and maintain their new nonsmoking lifestyle. Tensions and events that cause backsliding are anticipated; counter-strategies for coping without cigarettes are spelled out. Saying "no" to cigarettes requires practice. These kits are obtained from The American Lung Association, 8 Mountainview Avenue, Albany, NY 12205.

From the Roswell Park Memorial Institute, New York State Department of Health, Buffalo.

Dr Murphy is President Elect, American Cancer Society.

Address correspondence to Dr Murphy, Director, Roswell Park Memorial Institute, 666 Elm Street, Buffalo, NY 14263.

of smoking cessation.[4,5] The physician should encourage the patient to believe he can get along quite well without cigarettes and should assure him of the physician's own confidence in the patient's ability to stop. Counseling which relies too heavily on fear or guilt may cause the patient to "dig in" even further and increase smoking.

It is helpful to seek a commitment from the patient to agree upon a target date for ending all smoking. The date should be put in writing on the patient's chart. The physician must offer continuing encouragement and advice in all subsequent visits, even after the patient has stopped smoking.

It is essential to prepare the patient for possible side effects such as headache, smoking withdrawal, irritability, drowsiness, and insomnia. As with all good history-taking, the physician should also aid the patient in identifying situational cues to smoke. Alternate activities to substitute for smoking should be discussed.

The physician should become acquainted with materials available from the American Cancer Society, the American Lung Association, and the National Cancer Institute (Table). These materials should be scrutinized with the aim of developing improvements in individual approaches to the problem.

Smoking is a multifaceted problem that can be successfully solved through the commitment of the medical profession. An investment of time and interest by the physician during routine contacts with patients can go a long way toward ending the smoking pandemic.

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CIGARETTES AND DEATH CERTIFICATES

(*from the* Florida Medical Association Journal, *1973; 60:92*)

All of us are well aware of the role cigarette smoking plays in the causation of pulmonary emphysema and squamous cell carcinoma of the lungs. Most of us also realize the aggravating effects of cigarette smoking on coronary ischemic heart disease. For years we have neglected to mention tobacco on certificates of death except under the most unusual of circumstances.

Physicians are expected to render a clinical judgment as to the causative factors of death when a certificate is completed. There is no reason why we should continue to omit the most significant causative factor in the production of pulmonary emphysema and squamous cell carcinoma of the lungs when we certify. Certainly the use of tobacco is the major underlying causative factor in these two diseases.

The collection of accurate final statistics has always been a function of the State's Division of Health. It would be of great service if every physician in the State of Florida were to receive a directive from the Division of Health with a request that cigarette smoking or tobacco use be specifically mentioned on the death certificate when, in the clinical judgment of the certifier, this was a factor when death was caused by either pulmonary emphysema or squamous cell carcinoma of the lung or any other smoking-related diseases. An alternative would be a box to be checked off on the certificate which would designate whether or not the patient had been a heavy user of cigarettes. This would be simpler for the physician since it would require no additional judgment decision on his part in regard to the relationship of the death and cigarettes. Statistical analysis of the data so collected would, in the long run, accomplish the same desired purpose.

In the meantime, there is no reason why we physicians, on our own, could not begin to certify as has our colleague, Charles F. Tate, MD.

—JOSEPH H. DAVIS, MD
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1050 NW 19th Street
Miami, FL 33136

(*Editor's note: Dr. Davis prepared the comment below at the request of the* New York State Journal of Medicine.)

Ten years later, the death certificate in Florida is being emended to include a box not for indicating cigarette smoking but for recording the presence or absence of pregnancy. This is in spite of the fact that the catchment system of maternal mortality committees already assures a high level of success in documenting pregnancy-related deaths.

From a priority standpoint, what is needed is a box pertaining to cigarette smoking. Because the vast number of cigarette-related deaths is not being documented, the enormity of the problem remains largely unaddressed by government.

Changing death certificates to improve the reporting of maternal mortality while continuing to avoid the opportunity to document the two leading causes of death—tobacco and alcohol—is akin to studying a speck in the eye of a gnat while bearing down on us is a thundering herd of elephants.

—Joseph H. Davis, MD

Myths and realities of smoking cessation

JEROME L. SCHWARTZ, DRPH

Every physician can play a leading role in helping patients to give up smoking. However, misconceptions abound in regard to the process of ending dependence on cigarettes and thus have hindered clinical and political involvement of physicians in attacking the cigarette pandemic. Physicians overestimate their patients' awareness of the hazards of smoking and underestimate their own ability to get patients off cigarettes. This article will examine some of the myths and realities of smoking cessation which are raised time and again in the course of discussions with health professionals, individuals who no longer smoke, and persons who have continued to smoke.

MYTHS

"It takes too long to counsel patients." Although primary care physicians are busy people, and many claim they just do not have the time to go into detail with patients about smoking, it takes very little time for a physician to offer advice on how to stop smoking.[1] Most physicians ask each patient about smoking habits, and many do point out the evidence of smoking's harmful effects on the respiratory and cardiovascular systems. But many others—ironically often out of fear of offending or appearing to make a moral judgment—fail to present a strong statement about the importance and joy of not smoking.[2]

Blum[3] points out that the approach to each patient should be personalized, taking into account social, cultural, ethnic, and occupational factors, as well as the brand of cigarettes smoked (to get a better idea of the image the smoker may have of himself or herself). He suggests that the best approach to advising a construction worker on smoking might be to talk about the chances of increased fitness and enhanced sexual performance. On the other hand, an executive is more likely to take to heart an explanation of relative risk factors, while a teenager will be more concerned about self-image, and thus more susceptible to statements concerning the physical unattractiveness of yellow teeth and "zoo breath"—not to mention money down the drain that could be spent (or saved) for more pleasant activities.

"The general public is aware of the hazards of smoking." A report to the Federal Trade Commission has pointed out that the general public has *not* "heard it all before." [4] Approximately one fourth of the total population and about one half of all those currently smoking have still not accepted the proposition that "cigarette smoking is dangerous to your health" and can cause lung cancer. The report states that there is even less general acceptance of propositions linking smoking to specific health consequences such as heart disease, emphysema, chronic bronchitis, and lowered birth weight.

"People continue to smoke because they want to." Many people continue to smoke, not because they want to, but because they cannot easily stop. Smoking is a potent form of drug dependence, and a cigarette is a highly efficient device for administering nicotine,[5] as well as sugar and other flavoring agents for which the body has acquired a taste.

"Switching to low-nicotine cigarettes reduces risk." Those who switch to low-nicotine cigarettes compensate by smoking more, taking larger or more frequent puffs, and by inhaling more deeply.[6] Although use of low-tar cigarettes may result in lower mortality rates for lung cancer, this does not mean that rates for coronary heart disease or emphysema are reduced.

"95 percent of persons who stop smoking do so on their own." Although it is true that most people stop smoking without going through an organized method, many people act on the advice or warning of their physician.[7] The patient has to understand his dependence and be aware that stopping requires effort. Cessation may be easy for some, but it is difficult for most. A serious discussion would inform the patient that smoking cessation may be difficult but that it is necessary.

"Tranquilizers help people quit." The results for stopping smoking by using tranquilizers are very poor; prescriptions for tranquilizers for patients who suffer from acute anxiety when trying to stop smoking are contraindicated.[8] Instead the patient needs moral support to see him through the anxious period. Support, once the patient has stopped smoking, can include telephone conversations, reminders through the mail, face-to-face meetings, or devising a "buddy system" in which two or more patients keep in touch and support each other's efforts. Patients might even be advised to call the office (a sort of "smoking hotline") at the first urge to smoke. Even the suggestion that they have a place to phone is a powerful help. Office personnel can offer encouragement for continued abstinence and make suggestions regarding exercise, relaxation, or deep breathing. Those persons having a tough time can be put through for a brief conversation and morale boost with the physician; patients greatly appreciate this caring attitude on the part of the physician.

"Certain methods are just right for certain people." There is no particular method that is just right for a given individual. Sometimes it takes several practice tries before an individual can stop for good. It is often not the method but the point at which a person attempts to stop smoking. Like falling in love, timing is important.

Although it is claimed that good results have been achieved with hypnosis and acupuncture, evaluations are

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often faulty. A review of 17 studies of hypnosis revealed that after six months, abstinence ranged from 40% to 88%.[9] Better results were achieved with several hours of treatment and intense personal interaction. Investigators who used acupuncture with 405 subjects reported that it helped only between 5% and 15% to stop smoking for six months.[10] It was concluded that the effectiveness of acupuncture in smoking cessation is the result of a large psychologic component. From the results of several European studies of well-motivated individuals, it appears that nicotine-based chewing gum is a promising method, but the results of the studies vary greatly.

REALITIES

"About 4,000 known compounds are generated by burning cigarettes." The burning tip of a cigarette reaches 1900° F; by the time smoke reaches the inhaling tip, the temperature falls to about 100° F. Although carbon monoxide, nicotine, and tar are the main culprits in damaging health, there are many other noxious compounds, such as nitrogen oxides, nitrosamines, hydrogen cyanide, sulphur compounds, aldehydes and ketones, aromatic amines, alkanes and alkenes, carboxylic acids, arsenic, and various insecticide residues. Some of these compounds are poisons, and others are carcinogens and mutagens.

"Cigarette smoking is the most important preventable environmental factor contributing to illness, disability, and death in the United States." This has been the conclusion of successive surgeons general. In 1979 it was reported that the health damage resulting from cigarette smoking costs this nation an estimated 325,000 premature deaths each year, and $27 billion in medical care, absenteeism, decreased work productivity, and accidents.[11]

"Specific step-by-step instructions on how to stop smoking is the method preferred by patients." The Smoking Control Research Project conducted a survey of the willingness of individuals to accept 10 smoking withdrawal methods.[12] Instructions received the highest positive response of any of the methods, public health clinics the lowest positive response. Instructions received a 69% favorable response; medication, 66%; television programs, 64%; and books, 53%. This compares with 36% to 42% for individual counseling, hypnosis, lectures, tranquilizers, group discussion, and clinics. This means that individuals prefer to quit on their own, utilizing instructions, books, and television programs.

The physician can help the patient decide whether to quit cold turkey or to taper off. Environment must be considered, since it is difficult to stop when one is surrounded by others who smoke. Contrary to popular belief, persons strongly dependent on cigarettes can be advised to quit cold turkey; of course, they will suffer withdrawal symptoms but these must be faced.

"Health is the major reason for stopping." Most of those who stop smoking have become convinced that smoking is bad for their health. Some stop for other reasons: they no longer enjoy cigarettes, they begrudge the expense, others want them to stop, or they wish to serve in an exemplary role.[13] Some people stop once they decide that cigarettes are harming their health, particularly following diagnosis of a chronic disease condition or after a reduction in smoking because of an upper respiratory tract infection. Visits for coughs and colds are perfect opportunities for physicians to point out the folly of continuing to smoke and the waste of money on medications and doctor bills.

"Most methods achieve about the same results." Although a few methods have been reported to produce better results (perhaps the counselors were more experienced or because follow-up support was more effective), most methods achieve approximately the same success rate after one year. This implies that the committed physician may do wonders. Of great importance is an atmosphere within the office that emphasizes good health. The staff should not smoke; there should be no ash trays; nonthreatening, no-smoking signs or posters should be prominently displayed; and literature about stopping smoking should be available.

"Evaluation of smoking cessation programs lacks proper design." By and large, evaluations of smoking methods do lack proper design.[14] Many investigators conduct limited follow-ups, base their results on those who reply, and measure success inadequately—based on reduction in smoking rather than on total abstinence. Although reduction in smoking lowers risk, it is difficult to interpret results and compare programs unless "percent who quit" is used to measure the results. The rule should be a one-year follow-up, and success should be defined as one who has refrained from smoking for one year. One noticeable improvement is the number of investigators who choose to validate smoking behavior through blood or urine tests or measurement of expired air carbon monoxide. All programs should consider some form of validation, particularly methods linked to medical offices.

"Filters advertised as aids to break the cigarette habit don't work." Two studies of Teledyne Water Pik's "One Step at a Time" showed that the filter system for stopping smoking is not effective. In one study not one single person quit smoking at the end of the eight weeks when they were supposed to quit.[15] Follow-ups revealed that 10% stopped smoking, but they did it cold turkey after disposing of their filtration devices. In the second study, "One Step at a Time" was compared with "quitting on your own." [16] At the end of one year, "quitting on your own" recorded 33% abstinence, while the group on the filters achieved 22%. The investigators concluded that the data fail to document the utility of the filter system for stopping smoking.

"Follow-up support is necessary to maintain the quitting effort." Most persons need reassurance once they have broken the smoking habit. Physicians need to become aware of the importance of spending time supporting efforts of their patients to achieve good health habits.

"Success in breaking the habit depends on both the participant and the method." Persons who smoke must be committed to stopping; this commitment is stronger with people who believe that dangers of smoking are personally relevant, and in those who have a compelling reason to stop. This is why the role of the health practitioner is so important in helping patients to stop smoking.

CONCLUSION

Because of the overwhelming evidence implicating smoking as a major health hazard, all patients who smoke should be urged to stop. Unfortunately, many cigarette-related diseases are diagnosed too late to be reversed by cessation. There is evidence, however, indicating improvement in most conditions when the patient does stop smoking. Physicians can be successful in their efforts to control premature disease among their patients through a strategy focusing on health promotion: helping patients to stop smoking; and counseling all teenager patients not to start, so they will not have to go through the frustrations and discomforts of stopping once they realize, years later, that smoking really is harmful to their health.

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EMPHYSEMA BLUES

when you get down   and your lungs don't sound so good
you're coughin' up stuff   it's gettin' rough
to breathe the way you should

just give us a call   it won't take long at all
we'll clear up your chest   give you all the best
therapy in the store

we'll give you routine treatments   q.i.d.
volume ventilators are such a breeze
postural drainage   helps clear your lungs
i know you're gonna love it   it's so much fun

cardio-pulmonary   resuscitation
cheyne-stokes   respiration
acidotic alkalotic   laminar flow
gas, humidity and aerosol

got the coughin' wheezin' emphysema blues
coughin' wheezin' emphysema blues

nasal basal cannulas
saturate your bronchi
positive pressure helps force that gas
right down to your alveoli

so when you get down   and your lungs don't sound so bright
just give us a call   we'll run down that hall
and light your lucky strike

coughin' wheezin' emphysema blues
hackin' crackin' O_2 lackin' blues
rootin' tootin' gruesome sputum blues
coughin' wheezin' emphysema blues

—lyrics from one of two songs
of a record by Kirk & Blake;
available for $5 (incl postage) from
Kirk Torney Publishing, PO Box 7108,
Berkeley, CA 94707.
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A positive health strategy for the office waiting room

JOHN W. RICHARDS, JR., MD

In 1979 the American Medical Association (AMA) congratulated a group of magazine publishers for their refusal to accept tobacco-product advertising. The AMA was unstinting in its praise: "In view of the overwhelming evidence against smoking, your policy of refusing to accept tobacco advertising can only be construed as an unselfish act. America's physicians applaud your action."

The following year the Congress of Delegates of the American Academy of Family Physicians (AAFP) approved a resolution to "commend publications which have refused to accept tobacco advertising and to circulate to its members a list of these publications."

These actions came at the request of physicians in the AMA and the AAFP who also belong to DOC (Doctors Ought to Care, c/o Thomas Houston, MD, Floyd Medical Center, 304 Turner-McCall Blvd, Rome GA 30161). DOC had compiled a list of such magazines and had explored attitudes on the part of physicians and publishers on the subject of cigarette advertising in magazines placed in the office waiting room.

In 1979 DOC conducted a mail questionnaire survey of members of the South Carolina Medical Association, to examine their knowledge of smoking-related illness and patient education.

With regard to the various risk factors for premature deaths, most of the 156 respondents were aware that cigarette smoking was responsible for the highest number of premature deaths in the United States. It was also the one factor for which physicians felt the need for more patient education materials.

Although 70% of the respondents felt that the waiting room is a good place to learn about health (and 60% felt that patients thought so, too), 70 of 145 respondents to one question admitted spending nothing on health education materials for the waiting room; only 18 physicians claimed to spend more than $60 a year on such material, preferring to accept free pamphlets from the voluntary health agencies and governments. In contrast, more than half (83) subscribed to six or more commercial magazines for the waiting room, and two thirds of the respondents spent $50 or more each year on such subscriptions. The most frequently subscribed-to magazines were *TIME* (49), *Newsweek* (47), *Sports Illustrated* (33), *Better Homes & Gardens* (32), *People* (28), *US News & World Report* (27), and *Ladies Home Journal* (27). Only three of the top ten magazines subscribed to by physicians for their waiting rooms did not contain cigarette advertising: *National Geographic* (25), *Good Housekeeping* (22), and *Reader's Digest* (21). Intrigued by the DOC survey, one physician reported 390 pages of cigarette advertising in the magazines in his waiting room!

The most advertised product in the magazines most subscribed to by physicians for the patient waiting area is cigarettes. In magazines such as *TIME* and *Newsweek* cigarette advertising comprises between 15% to 80% of total color advertising for a given issue (except for the June 6, 1983 issue of *Newsweek* which contained a story on nonsmokers rights; *Newsweek*, not the tobacco companies, pulled the cigarette ads). Although they have published cover stories on AIDS, Legionnaire's disease, Tylenol, and toxic shock syndrome, these magazines have not carried a cover story on smoking since 1970—when the bulk of cigarette advertising switched into the printed media. In 1977, in an article on carcinogens, *Newsweek* listed tobacco as number 8 (arsenic was listed as number 1; the list was in alphabetical order). Each year, *TIME* and *Newsweek* accept in excess of $30 million in cigarette advertising, or approximately 20% of total advertising income. *TIME*, *Newsweek*, *Better Homes & Gardens*, and other magazines buy mailing lists of physicians to offer reduced "professional courtesy" subscription discounts.

When questioned by physician-subscribers about the policy of accepting cigarette advertising, *TIME* has sent form letters which say, "We respect your right to disagree with us." The publisher of *Better Homes & Gardens*, which has made a concerted effort to be portrayed as a health magazine (notwithstanding the 15 to 20 pages of cigarette advertising in each issue), has expressed his hope that "those people who do not smoke will turn past the cigarette ads." *Newsweek* has perhaps the lengthiest stock reply:

> We know that many of our readers object to the publication of cigarette and liquor advertisements. We feel, however, that if we were to accept some ads and reject others, we would be, in effect, endorsing products and making the very kind of editorial statement through our advertising columns that we so scrupulously avoid in our news copy. Therefore, we accept ads from the makers of all legal products, as long as these ads conform to the standards of good taste and ethical practice established by the Better Business Bureau and the Magazine Publishers Association.
>
> We hope you realize, though, that our editorial department is completely independent from our advertising department, and our running ads from tobacco companies and distilleries has never prevented us from conscientiously reporting on the health hazards and social problems related to smoking and drinking. We keep our readers informed about new findings establishing the connection between smoking and, for example, heart disease, ulcers and lung cancer. We examine the abuse of alcohol among teenagers, the dangers of mixing drugs and alcohol, and the link between drinking and birth defects. We think that through these reports we fulfill our responsibilities as an independent news source, whatever the content of the ads that appear in the magazine.

There are a few bright spots, most notably that of *Runner's World*, whose editor and publisher, Bob Anderson, has made a special appeal to physicians:

From the Department of Family Medicine, Medical College of Georgia, Augusta, Georgia.

Address correspondence to Dr Richards, Assistant Professor, Department of Family Medicine, Medical College of Georgia, Augusta, GA 30912.

> There's a serious problem sitting in your waiting room.
>
> It's magazines. Magazines filled with full-page advertisements promoting one of the most serious health problems in the world: Cigarettes. Just a glance through any one of hundreds of popular periodicals will indicate that they derive a major portion of their revenues from the thriving tobacco industry. And while your patients are sitting there waiting for you to help them improve their health, these high-powered ads are encouraging them to ruin it. Successfully, too. Because despite all the efforts to dampen America's voracious appetite for tobacco, the deadly weed is doing very well.
>
> We'd like to make a modest suggestion. Subscribe to a publication that refuses to accept cigarette advertising. It's *Runners's World* Magazine. In *Runner's World*, you'll find the same national advertisers found in those other magazines, but you won't find one advertisement promoting poor health. In fact, nearly every advertisement, and absolutely every article, *promotes* good health, exercise and proper diet. There are no advertisements for distilled spirits either . . .

On October 10, 1983, *The Saturday Evening Post* announced that effective with its March 1984 issue, it will no longer accept tobacco advertising. For a publication that had been fighting a tough battle for survival in recent years, the move suggests that publications that cultivate nontobacco advertising revenue no longer "must" accept cigarette ads. The *Post*'s publisher is Cory SerVaas, MD.

Some physicians, such as Hunter Fry of Melbourne, Australia, prefer to call attention to cigarette ads by writing ridiculing slogans on the ads with a felt-tip pen as a means of making patients more aware of how the ads undermine health. Other physicians buy a rubber stamp or stickers that say "This advertisement is a rip-off." Others, such as Stephen Barrett of Allentown, PA, head of the Lehigh Valley Committee Against Health Fraud, fill out the blank subscription forms in the magazines with the statement, "It is immoral to accept cigarette advertising." He has yet to receive a reply.

The physician has a golden opportunity to enhance the healthful environment of the office by scrutinizing magazines for misleading and antihealth advertising. If 400,000 American physicians vowed not to let their office waiting rooms be vehicles for cigarette sales, this would contribute significantly to health promotion. Canceling subscriptions to such publications—informing the publisher for the reason—might set the ball rolling toward changes in publishing policy.

Following is the most recent listing of magazines that do not accept cigarette advertising.

W = weekly; M = monthly; BM = every other month.

GENERAL INTEREST

Consumer Reports (M—$12) 256 Washington St, Mount Vernon, NY 10550
The Futurist (BM—$20) 4916 St Elmo St, Bethesda, MD 20814
Good Housekeeping (M—$12.97) 959 Eighth Ave, New York, NY 10019
Mother Jones (M—$18) 625 Third St, San Francisco, CA 94107
The New Yorker (W—$32) 25 West 43rd St, New York, NY 10036
Parents Magazine (M—$7.95) 685 Third Ave, New York, NY 10017
Reader's Digest (M—$12.93) Reader's Digest Rd, Pleasantville, NY 10570

TRAVEL

Adirondack Life (BM—$10) 420 East Genesee St, Syracuse, NY 13202
Arizona Highways (M—$15) 2039 West Lewis, Phoenix, AZ 85009
Missouri Life (M—$15) 1205 University Ave, Columbia, MO 65201
National Geographic (M—$15) 17th and M Streets, NW, Washington, DC 20036
Nevada Magazine (BM—$7.95) 101 South Fall St, Carson City, NEV 89410
Travel Holiday (M—$9) Travel Bldg, 51 Atlantic Ave, Floral Park, NY 11001
Vermont Life (Q—$4) Vermont Development Dept, 61 Elm St, Montpelier, VT 05602
Yankee (M—$14) Main St, Dublin, NY 03444

SPORTS

Bicycling (9/yr—$10) 35 East Minor St, Emmaus, PA 18049
The Runner (M—$15) One Park Ave, New York, NY 10016
Runner's World (M—$14.95) 1400 Stierlin Rd, Mountainview, CA 94043
Sail (M—$21.75) PO Box 10219, Des Moines, IA 50380

YOUTH

Boy's Life (M—$10.80) 1325 Walnut Hill La, Irving, TX 75062
Humpty Dumpty Magazine (8/yr—$11.95) 1100 Waterway Blvd, Indianapolis, IN 46206
Jack and Jill (8/yr—$11.95) 1100 Waterway Blvd, Indianapolis, IN 46206
Mad Magazine (8/yr—$9.75/10 issues) 485 Madison Ave, New York, NY 10022
Ranger Rick's (*nature magazine*) (M—$9.50) National Wildlife Federation, 1412 16th St, NW, Washington, DC 20036
Sesame Street (10/yr—$6.95) 1 Lincoln Plaza, New York, NY 10022
Seventeen (M—$11.95) 850 Third Ave, New York, NY 10022

(*continued on following page*)

Expect Taste.
MERIT the Enriched Flavor cigarette delivers a taste bonus that comes across loud and clear
Nothing halfway about it.
MERIT
TIME
FIGHTING COCAINE'S GRIP
Millions of Users
Billions of Dollars

Alive with pleasure!
Newport
Special Baseball Issue
Sports Illustrated
THE BEST IN THE BUSINESS
Montreal's Gary Carter: One Reason Why The National League Is Tops
20 Scouting Reports
The Twins' Calvin Griffith: Keeping The Peak In The National Pastime

Winston
This is your world. This is your Winston. Taste it all.
Winston
TV GUIDE
HOLLYWOOD'S COCAINE CONNECTION
How Drug Abuse in the Television Industry Affects Programs You Watch

These four magazines lead in income from cigarette advertising.

AVOCATIONS

American History Illustrated (10/yr—$16.95) Box 822, Harrisburg, PA 17105
British History Illustrated (BM—$12) Cameron & Kolker Streets, Harrisburg, PA 17105
Collectibles Illustrated (BM—$11.50) Main St, Dublin, NH 03444
Crafts (M—$15) PO Box 10103, Des Moines, IA 50347
Dance Magazine (M—$22) 1180 Avenue of the Americas, New York, NY 10036
Fishing Facts (M—$17.88) PO Box 609, Menomonee Falls, WI 53051-9984
Historic Preservation (BM—$15) National Trust for Historic Preservation, 1785 Massachusetts Ave, Washington, DC 20036
Horticulture (M—$18) 300 Massachusetts Ave, Boston, MA 02115
Model Railroader (M—$20) 1027 North Seventh St, Milwaukee, WI 53233
Modern Photography (M—$7.98) PO Box 10785, Des Moines, IA 50349
Organic Gardening (M—$12) 35 East Minor St, Emmaus, PA 18049
Personal Computing (M—$18) 50 Essex St, Rochelle Park, NJ 07662
Popular Communications (*ham radio*) (M—$12) 76 North Broadway, Hicksville, NY 11001
Popular Computing (M—$12.97) PO Box 307, Martinsville, NJ 08836
Railfan & Railroad (M—$17) PO Drawer 700, Newton, NJ 07860
Theatre Crafts (9/yr—$15.75) Suite 312, 250 West 57th St, New York, NY 10017
Writer's Digest (M—$18) 9933 Alliance Rd, Cincinnati, OH 45242

SCIENCE

Animal Kingdom (BM—$7.95) 185th Street and Southern Blvd, New York, NY 10460
Audubon (BM—$13) 950 3rd Ave, New York, NY 10022
Natural History (M—$15) Central Park West at 79th St, New York, NY 10024
Nutrition Action (10/yr—$10) Center for Science in the Public Interest, 1755 S St, NW, Washington, DC 20009
Scientific American (M—$21) 415 Madison Ave, New York, NY 10017
Smithsonian (M—$17) 900 Jefferson Dr, Washington, DC 20560
The Sciences (10/yr—$12.50) 2 East 63rd St, New York, NY 10021
Zoo News (M—$8) PO Box 551, San Diego, CA 92112

NYJ NEWS FEATURES

"Non-smoking, please"

A money-saving proposition

In both the marketplace and the workplace, there is a growing demand for a smoke-free environment. The travel, food, and lodging industries are responding to this demand, and some businesses are providing cleaner indoor air environments for their employees and customers.

For Muse Air, a Dallas-based airline flying mainly between California and Texas, the decision to make no smoking the rule on all of its flights was strictly a matter of economics. Muse saves on maintenance costs, such as by having cleaner air filters, and the policy pleases its passengers. It also pleased the American Association for Respiratory Therapy, which presented Muse Air with the first AART Special Recognition Award at a midair ceremony aboard a flight from Dallas to Houston in July.

Chicago's Midway Airlines lent support to the Great American Smokeout on November 17 by leaving on the "no smoking" signs throughout its flights.

Passengers on touring buses run by Maupintours are also assured of a clean-air environment. The Kansas City-based company prohibits smoking on all of its buses.

Between May and September Cebu Cruises (Room 2, 1017 168th Ave SE, Bellevue, WA 98008) offers 8- or 11-day non-smoking cruises along the Pacific Northwest coast.

La Quinta Motor Inns began offering no-smoking accommodations in 1981, at the suggestion of an allergist in Charleston, SC, who requested smoke-free rooms for his patients coming into the city for treatment. The idea proved so popular that many other inns in the San Antonio-based chain have added as many as 16 clean-air rooms.

In 1978, Ramada Inns, Phoenix, set aside rooms in all of its motels for people who do not smoke. The rooms have nearly a 100% occupancy rate. The Executel chain, Seattle, and Canada's Four Seasons Hotels, Ltd, are other examples of innkeepers that offer smoke-free rooms.

For another innkeeper, profit is only part of the motive for offering no-smoking accommodations. Lyndon Sanders, SC, the 54-year-old owner of the Non-Smokers Inn, Dallas, believes that the deaths of his father and at least a dozen close friends were caused by cigarette smoking. A plaque by the flagpole in front of the Inn reads:

> When this flag flies at half staff, it does so in memory of over 1,000 Americans who die daily due to the effects of tobacco. And as a challenge to the social acceptance of smoking in public places. Lyndon Sanders, Sr. November 18, 1982.

Sanders requires prospective employees to undergo polygraph tests to prove that they haven't smoked for the past six months. Guests at the Non-Smokers Inn sign an agreement acknowledging that if they smoke in the room, they must pay a $100 fine to cover the cost of cleaning and deodorizing. The 134-room inn began turning a profit six weeks after it opened and is booked solid most nights. There has been no damage from cigarettes placed on furniture or dropped on carpeting. Sanders says that the lack of cigarette damage enables him to run the Inn at a cost of 30% less than a comparably-sized hotel.

Despite the interest among some hosts to offer no-smoking rooms to their guests, travelers to large cities may still be hard-pressed to find such accommodations. *Journal* telephone inquiries to the reservation desks at six New York City hotels (New York Hilton, New York Sheraton, Sherry Netherland, United Nations Plaza, Helmsley Palace, and the Plaza) found none that set aside rooms for guests who do not smoke.

The business with clean-air environments that are springing up around the country are slowly being tied into an informal network aided by travel agencies. Thrifty-Rent-A-Car and some major hotels in cities served by Muse Air now offer completely smoke-free arrangements that travel agents can book when they make Muse flight reservations.

For example, a person who does not smoke can hop aboard a Muse Air flight from Dallas to Los Angeles, rent a Thrifty-Rent-A-Car on arriving at Los Angeles International, and drive to Sunset Boulevard, to check into one of the no-smoking rooms at the Hyatt Regency.

Also taking advantage of the proliferation of businesses that cater to people who do not smoke is the Nonsmokers' Travel Club (8928 Bradmoor Drive, Bethesda, MD 20817). Founded in 1974, the Nonsmokers' Travel Club now has 1,400 members in the United States and Canada. The club sponsors three domestic and foreign trips a year. Members travel in the no-smoking sections of airplanes and employ nonsmoking drivers and guides on bus tours. As part of each tour, arrangements are made for meals in the nonsmoking sections of restaurants.

A trip to Atlanta, GA, for example,

NYJ News Features is compiled by Marc Kusinitz, PhD.

may include a meal at Mary Mac's, one of the city's largest restaurants. Mary Mac's offers "Southern Hospitality, 'DamYankee' Efficiency," and a no-smoking section that includes over half of its 375 seats. There is a demand for even more smoke-free seating.

In New York, the local chapter of Group Against Smoking Pollution (GASP, 7 Maxine Avenue, Plainview, NY 11803) encourages patronage of restaurants that have a no-smoking section or room available at all times. A recent issue of GASP's newsletter commends such restaurants as Baron's III (Veteran's Memorial Highway, Bohemia), Milleridge Inn (Broadway, Jericho), Pumpkin Eater Natural Foods (Broadway at 91st, Manhattan), and The Beanstalk (Sixth Avenue at 48th Street). The Scobie Diner (Northern Boulevard, Little Neck), which attracts patrons from throughout the New York City area, has a spacious nonsmoking area that is filled round-the-clock.

Other service industries have also found that many customers appreciate a smoke-free environment in which to transact their business. The Northport, WI, branch of H & R Block restricted all smoking by its consultants to ventilated restrooms after clients complained about the smoke-filled consultation rooms.

Not only customers, but employees, too, are the beneficiaries of clean air policies. The W W Richardson Insurance Company, Warren, RI puts workers who smoke into rooms separate from those who do not smoke. For the past six years, Radar Electric Inc, Seattle, WA, has had the question, "Do You Smoke?" at the top of its employment application form. The hundreds of prospectives employees who answered "yes" have been turned away. IBM headquarters in Armonk, NY prohibits smoking in common areas such as elevators and photocopying rooms. The company's cafeterias set aside no-smoking sections.

The Wall Street Journal reported last year that managers are increasingly requesting employment agencies to send them people who do not smoke. A Los Angeles employment agency, Bright Futures, receives the most requests for people who do not smoke from accounting, legal, and banking firms. Very few such requests come from health-care institutions.

Businesses that restrict or ban smoking may gain more than the gratitude of their employees. At the Fifth World Conference on Smoking and Health, William L. Weis, Associate Professor of Business at Seattle University pointed out that, compared to those who do not smoke, the average employee who smokes uses about 50% more sick leave and uses the health care system at least 50% more often. The worker who smokes suffers more than twice the mortality rate of nonsmokers during his working years and wastes an estimated 6% of his working hours in the "ritual" of smoking (handling the cigarette, lighting up, putting out the cigarette). Moreover, cigarette smoke forces industries to spend about six times the capital and operating expenses to maintain adequate air circulation. It also increases maintenance costs for cleaning, repainting, and replacing furniture. The person who smokes also may impose a costly liability on an employer for damages sustained by co-workers forced to work in a smoky environment, and decreases the morale of those workers because of the irritation and discomfort of working in a smoke-filled environment.

Rent a car. Send roses. Free.

Your Choice.

The No-Smoking Car, or The Smoker's Car.

Thrifty Worldwide
Reservations 800-FOR-CARS

Farmers has a 25% discount on non-smoker auto insurance.

Now Farmers has lower rates for drivers who haven't smoked in two years or more. Our Non-smoker Discount is 25% under standard rates.

We've found that people who don't smoke tend to be better risks as drivers. And better risks deserve better car insurance rates. Ask me if you qualify.

CALL:
JESS DRIVER OR
JACK HILL
262-2100
4818 Johnson Drive
Mission, Kansas

FARMERS INSURANCE GROUP
Symbol of Superior Service

The tobacco industry is aware of the growing concern among workers and consumers of the health threat posed by cigarette smoking. As far back as 1973, the *U.S. Tobacco Journal* reported: ". . .the most potentially dangerous threat to the future of the tobacco industry is. . .the developing psychological attitude that smoking is somehow socially unacceptable. . .".

How has the cigarette industry responded? Apart from a series of pamphlets and newspaper and magazine advertisements attacking the "anti-smokers" for attempting to undermine personal freedoms, individual companies, especially RJ Reynolds, in its ads for Winston and Vantage, have glorified the hard-driving, smoking worker. But the trend is clearly going against Reynolds, as illustrated by the passage of a stringent clean air ordinance for the workplace by voters in San Francisco.

According to an item in Regina L. Carlson's report, *Smoking or Health in New Jersey*, a 1980 Louis Harris poll found that while 33% of US workers smoke on the job, 51% of co-workers object to smoking on the job. Carlson, the executive director of the New Jersey Group Against Smoking Pollution (GASP), also cited a US government poll that found that 70% of the population, including a majority of those who smoke, agreed that public smoking should be limited.

Carlson's publication, sponsored by the New Jersey State Health Department, contains a review of judicial decisions resulting in compensation to workers exposed to cigarette smoke. In one decision (Fuentes vs the Workers Compensation Appeals Board), the California Supreme Court upheld a $10,000 award to a worker for a lung injury resulting in permanent partial disability, 25% of which was judged to be attributed to cigarette smoking, a third of which occurred on the job.

In addition to healthier workers, a safer working environment, and lower overhead for businesses that restrict smoking, another possible benefit of not smoking can be lower life insurance premiums. In 1984, when the first Surgeon General's report was published, the State Mutual Life Assurance Company was the first insurance company to undertake an exhaustive study of the mortality rate differentials between those who smoke and those who do not. Because people who do not smoke were found to be much better health risks, the company began providing discounts to those people who had not smoked within the past 12 months.

Fifteen years later, State Mutual compared the death rate of policy holders who smoked with those policy holders who did not.

In their report on this study for State Mutual entitled, "Mortality Differences Between Smokers and Non-Smokers," Michael J. Cowell, Vice President and Chief Actuary, and Brian L. Hirst, Associate Actuary for the company, pointed out that State Mutual's intent is not to take a moral position. State Mutual merely acknowledged that people who don't smoke are better insurance risks than those who do smoke:

> Against this background, we conclude that non-cigarette smokers could be considered as the population that defines "standard" risks, while smokers could be considered substandard, with the degree of rating increasing with the extent of their smoking habits. Nonsmokers who are better than average in other underwriting considerations (e.g., build or blood pressure) could be considered preferred risks.

Among the many other insurance companies that offer discounts to people who don't smoke are Kentucky Central Life, Home Life Insurance Company, Prudential, and Phoenix Mutual. Phoenix Mutual also offers lower group life insurance rates to small companies that prove that none of their workers smoke. The trend in nonsmokers' discounts is gradually extending to fire, health, and even automobile insurance (since persons who smoke are likely to drink more heavily than those who do not smoke).

For better or worse, then, the movement away from a smoking society may have as much to do with the money saved as with ending the hazard to health or the odor in the air.

The AMA tackles smoking

"A strong stand"

For thirty years, since banning cigarette advertising from JAMA *in 1953, the American Medical Association (AMA) has been in the thick of efforts to curb smoking and its promotion. The following review of AMA actions on smoking, gleaned from* JAMA *and* American Medical News, *was prepared by Jessica Rosenberg, a medical student at New York University, who served as a research assistant at the* Journal *during 1983.*

SUPPORT FOR RESEARCH

In December 1963, following approval by the House of Delegates, the Board of Trustees of the AMA appropriated $500,000 for a long-range program of research on tobacco and health, "to be devoted to the study of human ailments that may be caused or aggravated by smoking, the particular element or elements that may be the causal or aggravating agents, and the mechanisms of their action."[1] The Board's hoped-for outcome was the identification and removal of the harmful components in tobacco as a means of making smoking safe. The program, to be directed by the AMA's Education and Research Foundation (AMA-ERF), was described in *JAMA* as "a vigorous and farsighted response to the smoking problem."[2]

The Surgeon General's *Report on Smoking and Health* was issued two weeks before the first meeting of the five-man AMA-ERF Research Committee on January 31, 1964. The three committee members who had also served on the Surgeon General's Public Health Service Advisory Committee emphasized that the AMA program in no way contradicted the purpose and conclusions of the Surgeon General's report.[3]

The AMA-ERF Committee was authorized to solicit funds for the research, provided that they were "given without restrictions." Within weeks, six tobacco companies contributed $10 million to the research, to be given over a five-year period. "On that basis, the members of the board of directors of the foundation were pleased to accept the generous offer to these companies," said Raymond M. McKeown, MD, AMA-ERF president.[4]

Three years into the program, Committee chairman Maurice H. Seevers, MD, stated that "certainly there are no scientific data that would contradict the basic tenets of the Surgeon General's report.[5] He added, "while the medical profession and tobacco industry have somewhat divergent reasons for promoting tobacco research, both are committed to basic scientific research as the best means of developing specific answers to the questions raised by our smoking population." In 1968, the six tobacco companies pledged an additional $8 million toward the AMA-ERF research.[6]

In 1978 the Committee published the 365-page report, *Tobacco and Health*, recording and summarizing the results of the research. A major conclusion of the report was "that cigarette smoking plays an important role in the development of chronic obstructive pulmonary diseases and constitutes a grave danger to individuals with preexisting diseases of the coronary arteries." [1] Other findings concerned the "effects on behavior and on biochemical mediators elicited by nicotine," and "mechanisms by which nicotine may influence the production of peptic ulcer." Although the Committee had limited the number of awards for cancer research because this area is otherwise generously financed, potent cocarcinogens were identified in tobacco tar, and the inducibility of aryl-hydrocarbon hydroxylase was identified as a determinant of susceptibility to lung cancer.

The Committee's statement of a decade earlier that "research under the aegis of the project had not altered the conclusions of the 1964 report of the Surgeon General" was reiterated in the forward to the 1978 AMA-ERF volume.

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* American Tobacco Company; Brown & Williamson Tobacco Corporation, now a unit of BATUS or British-American Tobacco; Liggett & Myers; Lorillard, now a unit of Loews Corporation; Philip Morris, Inc; and R.J. Reynolds Tobacco Company.

The report appeared at a time when Health, Education & Welfare Secretary Joseph Califano, Jr., was an outspoken critic of the tobacco industry. The date of release coincided with a visit by President Jimmy Carter to North Carolina. On learning the conclusions of the industry-financed report, Carter publicly repeated an earlier statement that:

> . . .nobody need fear the facts about tobacco use. Certainly, no one need fear the emphasis on research that will make the use of tobacco in the future even more safe than it has been in the past.[7]

In a news release, Horace Kornegay, president of the Tobacco Institute, castigated the AMA, accusing it of contriving the timing of release of the report to coincide with and discredit President Carter's trip to visit tobacco growers in North Carolina. Kornegay also attacked the report as old news and blamed the AMA's subcommittee for "generalizations" that would prejudice future research—"to the public detriment":

> The (tobacco) industry deplores the politics of the release of this document by the AMA. In a spirit of corporate responsibility and a genuine sustained desire to find necessary answers, the tobacco industry will continue to devote funds to scientific research to find a resolution to the smoking and health controversy.[8]

WARNING LABELS

In 1957 the Legal and Monetary Subcommittee of the Government Operations Committee of the United States House of Representatives held hearings on the responsibility of the Federal Trade Commission (FTC) regarding advertising claims for filter cigarettes. The chairman of an AMA cancer research committee testified that a human being would have to smoke 100,000 cigarettes a day to get the equivalent exposure of tar to that which produced skin cancer in mice.[9] Following publication of the Surgeon General's report on smoking, the AMA supported research as the proper way to deal with the cigarette problem. The AMA specifically opposed the addition of warning labels to cigarette packages, and testified as such to the FTC in a letter from AMA Executive vice-president, FJL Blasingame, MD: "The health hazards of excessive smoking have been well publicized for more than ten years and are common knowledge," Blasingame wrote. "Labeling will not alert even the young cigarette smoker to any risks of which he is not already aware.[10]

Although the successful camouflaging of the warning labels by cigarette manufacturers lends ironic credence to Blasingame's viewpoint, the AMA position on labeling led to the charge that the AMA was engaging in political tradeoffs with the tobacco industry. Representative Frank Thompson, Jr., (D, New Jersey) accused the AMA of siding with the tobacco industry as part of a deal to get tobacco state congressmen to vote against proposed Medicare legislation.[11] Blasingame responded by calling Thompson's charge "slanderous," but his description of the AMA position raised questions about the AMA's acceptance of tobacco industry money: "We believe that since people will continue to smoke, the answer lies not in restrictive rules and regulations but in research into the effect of tobacco on smoking, the results of which conceivably could eliminate the hazards of smoking. The AMA has embarked on such a research program, with the assistance of a $10-million grant from the six major tobacco companies," Blasingame replied.[11,12] Warning labels were mandated by Congress in 1965, and the AMA later reversed itself on the labeling issue. The 1980 Report of the Council on Scientific Affairs of the AMA, *Smoking and Health*, recommended that health warnings on cigarette packages be made even more explicit, and that they be displayed on all cigarette advertising as well as on the packages.[13]

RECOMMENDATIONS

The House of Delegates at the AMA Annual Convention in 1964 adopted a statement that recognized "a significant relationship between cigarette smoking and the incidence of lung cancer and certain other diseases, and that cigarette smoking is a serious health hazard."[14] The House further recommended that health education programs on the hazards of smoking be developed by the AMA for members of all age groups, and be made available through various media.

At the AMA Annual Convention in 1969, the House of Delegates passed a resolution that dealt with several aspects of the smoking problem. The AMA resolved to "again urge its members to play a major role against cigarette smoking by personal example and by advice regarding the health hazards of smoking."[15] It also criticized the "incongruity" of government spending of tax dollars to promote the production and sale of tobacco while also spending more tax dollars to discourage smoking as a health danger. Finally, as part of a resolution "to discourage smoking by means of public pronouncements and education programs," two anticigarette posters were developed, designed to provoke an emotional response against smoking.

At the 1970 Convention, the House of Delegates resolved to urge the Federal Aviation Administration to require separate nonsmoking sections on all public air transportation, when the size of the aircraft permitted. A resolution that the AMA urge Congress to enact legislation to end tobacco subsidies was referred back to the Board, since it was considered that they, through the AMA President, were already taking appropriate action.[15]

The House of Delegates took personal action against smoking at the 1972 Annual Convention, adopting a resolution discouraging (but not banning) smoking during sessions of the House.[17]

In the last decade, several physicians within organized medicine, including an editor of *JAMA*[18] have called for greater involvement in the smoking problem by the AMA.[19-22] In an editorial in *JAMA*, Sheldon B. Cohen, MD, questioned the AMA's failure to take strong action to prevent and eliminate smoking, while spending $200,000 to eliminate television violence, "an area where the data are much less firm and that is much less directly connected with the everyday practice of medicine."[23]

In 1978, the Resident Physicians Section (RPS) adopted a resolution 121(I-78) that called for the development and funding of a multimedia antismoking and "positive health" campaign. The RPS further called for the AMA to commend publications that refuse to accept cigarette advertising, and for physicians to communicate the hazards of cigarettes and the necessity of not smoking to their patients.

At the 1979 Annual Convention, the Board rejected a resolution for a "positive health" program on the grounds that its intent was already being implemented and that the expenditure was not warranted. The AMA did support the resolution by the RPS calling for the AMA to publicly commend publications that refuse to accept cigarette ads, and to provide the list of publications to AMA members. It also supported a resolution directing the AMA to request television networks to halt the use of athletes to endorse tobacco products. Finally, in adopting the report of Council on Scientific Affairs, *Smoking and Health*, the AMA allocated $45,000 to an anti-smoking campaign that emphasized smoking cessation and research.

In 1980, the AMA Board rejected resolutions that the AMA support efforts to pass legislation banning cigarette advertising and restricting smoking in public places, on the grounds that the Council Report adequately dealt with those issues. The Board further rejected a resolution to support "The Cigarette Safety Act" requiring that cigarettes be self-extinguishing, arguing that the bill was not specific on how the self-extinguishing cigarettes were to be made, and that further research was needed. However, in 1982 the House of Delegates endorsed the Cigarette Safety Act.

Until September 1981, the AMA Members Retirement Plan held approximately $1.4 million in stock in Philip Morris and R.J. Reynolds. In June the House of Delegates had rejected an RPS resolution to divest the stock, but responding to adverse publicity and pressure from some of its members, including the RPS and medical student sections, the AMA Plan divested itself of all tobacco stocks. (None of the newspaper editorialists who chastised the AMA over this matter chose to examine their own publishers' unquestioned acceptance of cigarette advertising money or to praise the AMA for voting to urge an end to tobacco subsidies.)

At its Interim Meeting in December 1982 the House of Delegates took action to disapprove and discourage the promotional distribution of free cigarettes, and to develop model local and state legislation to prohibit the practice on public policy. The issue had been introduced by the AMA's Medical Student Section, which expressed concern that samples are often illegally handed out to minors.

The AMA's Reference Guide to Policy & Official Statements[24] leaves no doubt about the increasing commitment of the AMA to a reduction in smoking:

> The American Medical Association urges its members to play a major role against cigarette smoking by personal example and by advice regarding the health hazards of smoking.
>
> The AMA discourages smoking by means of public pronouncements and educational programs, and takes a strong stand against smoking by every means at its command.

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Using athletes to push tobacco to children

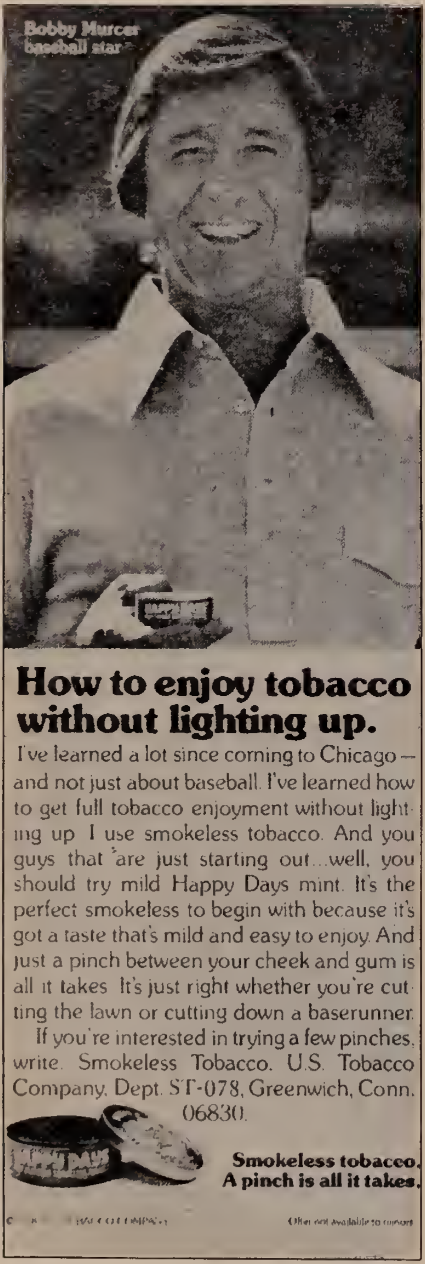
Snuff-dippin' cancer-lipped man

In 1983 nearly 4,000 cigarettes are expected to be sold for every adult in the United States; in 1880, the per capita consumption was 25. The astronomic increase in cigarette smoking during the past 100 years has corresponded to the decline of all other forms of tobacco (cigar, pipe, plug, snuff), not to mention the disappearance of the spittoon.

Ironically, the popularity of cigarettes began in large part as the result of concerns about health. The spread of tuberculosis in the latter half of the 19th century led to an increase in antispitting laws and a resultant shift by tobacco companies into the promotion of cigarettes—mass produced on newly invented machines.

Until the 1960s consumption of smokeless tobacco products steadily declined. With the publication in 1964 of the Surgeon General's *Report on Smoking and Health*, sales of smokeless tobacco began to rise. Although subsequent reports of the Surgeon General have discussed the carcinogenic properties of all forms of tobacco, between 1960 and 1970 sales of snuff and chewing tobacco rose 25%, and between 1970 and 1980 sales doubled again (*Adweek*, July 13, 1981).

Until recent years snuff dipping was a practice confined largely to black women in the rural Southeast, in whom the chance of contracting oral cancer has been found to be 50 times that of nonusers of snuff.[1] Similarly, tobacco chewing was a custom of rural southern men. In 1980 Christen, McDaniel, and Doran[2] called attention to widespread snuff-dipping and tobacco chewing among baseball and football players in college, high school, and elementary schools in Texas. These practices have been described as "the latest crazes" among teenage boys in the suburbs in the Northeast and in Washington, DC (*Washington Post*, November 12, 1980). One in 10 Colorado high school students surveyed by Greer uses smokeless tobacco; the age of the average user is 15.


Bobby Murcer
baseball star

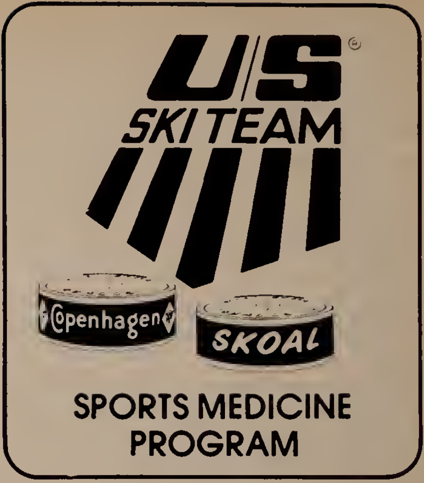
How to enjoy tobacco without lighting up.

I've learned a lot since coming to Chicago—and not just about baseball. I've learned how to get full tobacco enjoyment without lighting up. I use smokeless tobacco. And you guys that are just starting out...well, you should try mild Happy Days mint. It's the perfect smokeless to begin with because it's got a taste that's mild and easy to enjoy. And just a pinch between your cheek and gum is all it takes. It's just right whether you're cutting the lawn or cutting down a baserunner.

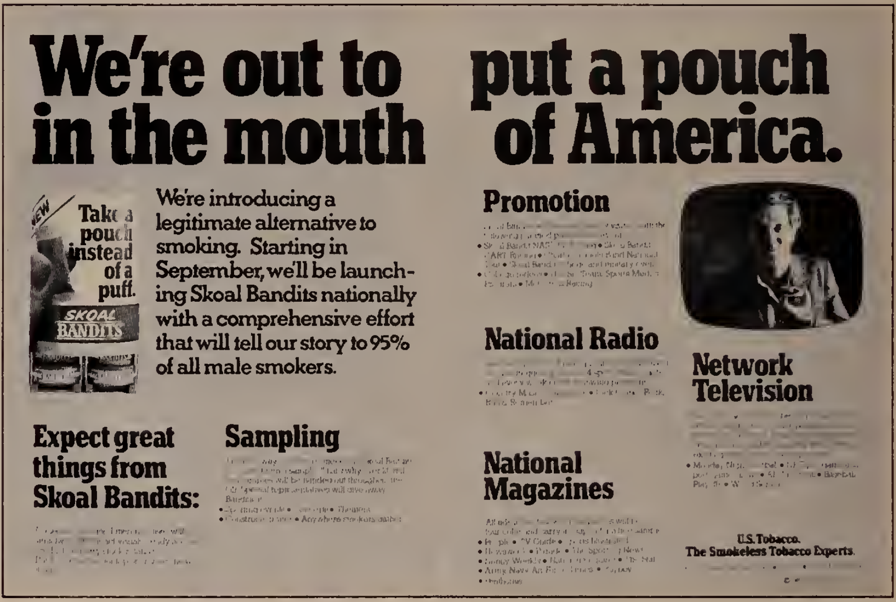
If you're interested in trying a few pinches, write. Smokeless Tobacco. U.S. Tobacco Company, Dept. ST-078, Greenwich, Conn. 06830.

Smokeless tobacco.
A pinch is all it takes.

There is no mystery to this phenomenon. Unlike cigarette advertising, commercials for these carcinogenic products have not yet been withdrawn from television, and manufacturers have taken advantage of the situation. The heroic imagery evoked in expensive promotional campaigns for snuff and chewing tobacco is—in a word—matchless. The array of celebrities employed to cultivate the puberty rite of tobacco use includes baseball players George Brett, Carlton Fisk, Catfish Hunter, Sparky Lyle, and Bobby Murcer, and football players Terry Bradshaw, Nick Buoniconti (now a tobacco and candy distributor), Earl Campbell, Joe Klecko, and Laurence Taylor (*Advertising Age*, June 23, 1980; *U.S. Tobacco Journal*, March 8, 1982). Singer Charlie Daniels appears on a collection of high-priced paraphernalia for a brand of snuff, Skoal, a product of the United States Tobacco Company, Greenwich, CT. A race car driver, Harry Gant, drives a car painted with "Skoal Bandit"; his entourage includes a group of cheerleaders called the Skoal Bandettes. In 1983, a commercial record, "Skoal Dippin' Bandit," sung by New York Yankee Bobby Murcer, was frequently played on teenage-oriented radio stations. "The people at the stock car races walk around in their Skoal T shirts and Skoal caps and they greet one another as people who belong to something special," said Per Erik Lindqvist, vice-president of marketing at United States Tobacco (*U.S. Tobacco Journal*, March 8, 1982).



Official Sponsor



We're out to put a pouch in the mouth of America.

We're introducing a legitimate alternative to smoking. Starting in September, we'll be launching Skoal Bandits nationally with a comprehensive effort that will tell our story to 95% of all male smokers.

Expect great things from Skoal Bandits:

Sampling

Promotion

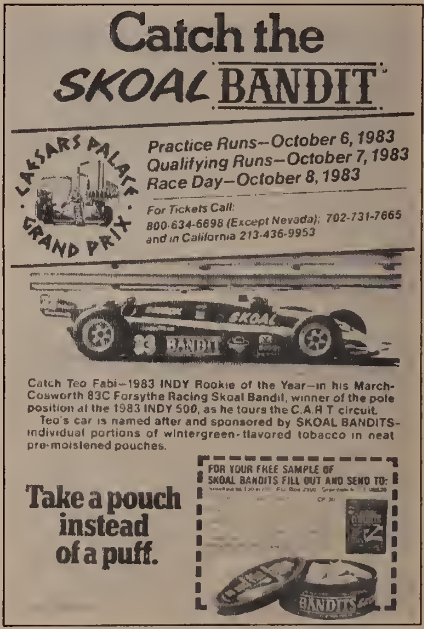
National Radio

Network Television

National Magazines

U.S. Tobacco.
The Smokeless Tobacco Experts.

Responding to a question from the *U.S. Tobacco Journal* about why so many young males are buying smokeless tobacco, United States Tobacco Company chairman and president Louis



Catch the SKOAL BANDIT

CAESARS PALACE GRAND PRIX
SKOAL
BANDIT
83
BANDITS

Practice Runs—October 6, 1983
Qualifying Runs—October 7, 1983
Race Day—October 8, 1983

For Tickets Call:
800-634-6698 (Except Nevada); 702-731-7665
and in California 213-436-9953

Catch Teo Fabi—1983 INDY Rookie of the Year—in his March-Cosworth 83C Forsythe Racing Skoal Bandit, winner of the pole position at the 1983 INDY 500, as he tours the C.A.R.T circuit.

Teo's car is named after and sponsored by SKOAL BANDITS—individual portions of wintergreen-flavored tobacco in neat pre-moistened pouches.

Take a pouch instead of a puff.

FOR YOUR FREE SAMPLE OF SKOAL BANDITS FILL OUT AND SEND TO:

Bantle said, "I think there are a lot of reasons, with one of them being that it is very 'macho'."

Bantle estimated that 80% to 85% of his company's customers are new users and not just those who switch from cigarettes out of concern for health. He also reported that United States Tobacco is intensely aiming at a budding international market.

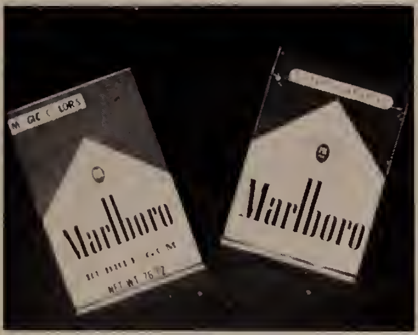
A public relations operation, the Smokeless Tobacco Institute, in Peekskill, New York, issues press releases to let the public know about the shortcomings of medical research reports implicating snuff as a cause of oral cancer (*Advertising Age*, April 13, 1981).

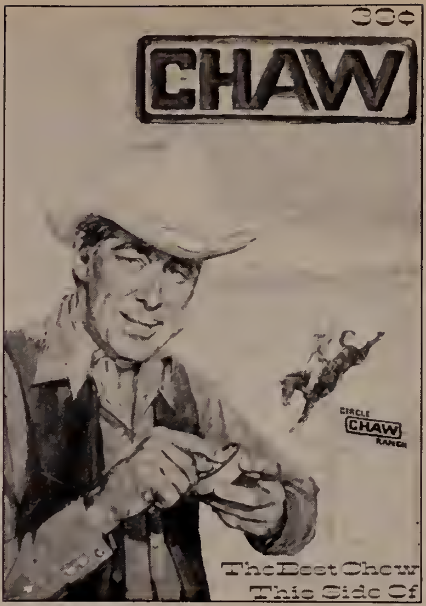
With the recent 16¢ rise in the federal excise tax on a pack of cigarettes, United States Tobacco has begun a national $2 million advertising campaign for Skoal Bandits—little pouches of snuff, like teabags. The campaign was launched in July in New York City on radio and TV and in newspaper sports sections, including *The New York Times* and *Newsday.* The television advertisements on such programs as ABC TV's Wide World of Sports and NBC TV's Football Game of the Week teach the potential young "Bandit" the technique for using snuff. (*Advertising Age*, June 27, 1983)

During the 1980 Olympic Games, the United States Tobacco Company, an official sponsor, spent $2,500,000 promoting snuff. For 1984, it has created a United States Tobacco Sports Medicine Program. Various sports writers, TV editorialists, athletic commissioners, team owners, players, and nontobacco sponsors of professional sports have vied for media attention in 1983 to condemn drug abuse among athletes and teenagers. Yet none has publicly challenged the campaign of the United States Tobacco Company.

It could be argued that the morbidity and mortality attributable to smokeless tobacco is so much less serious than that of cigarette smoking as to be an acceptable lesser of two evils. But the more likely hypothesis, in light of the cigarette companies' not having objected to the exclusion of smokeless tobacco from the ban on television advertising, is that the Skoal ads serve as an initiator to a milder form of tobacco use and may start even younger children on the road to cancer.

Can there be a more cynical attempt to capture the youth market than that by the makers of cigarettes, snuff, and chewing tobacco? Apparently so. A child walking through almost any candy store, supermarket, pharmacy, airport souvenir stand, or variety store cannot fail to come across a prominent display for candy cigarettes (with brand names identical to the real ones), cigars, pipes, and pouches of Big League Chew, a shredded bubble gum that produces "man-size wads" and that in the words of its inventor, former baseball player Jim Bouton, is "designed to look like chewing tobacco used by baseball players "(*Advertising Age*, June 23, 1980). Then there is Chaw, powdered bubble gum in a round little box resembling a tin of snuff. A display for Chaw features a cowboy with a bulging cheek and the slogan, "Best chew this side of the Pecos."





What next can we expect from the candy companies—bubble gum cocaine?

ALAN BLUM, MD
Editor

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GOVERNMENT INVOLVEMENT IN SMOKING AND HEALTH

The Office on Smoking and Health is the focal point for all smoke-related activities of the Department of Health and Human Services.

The Office prepares and disseminates the annual Surgeon General's reports on smoking, the last five of which have honed in on specific aspects of the problem: *The Health Consequences of Smoking, The Behavioral Aspects of Smoking, Education, and Prevention* (1979); *The Health Consequences of Smoking for Women* (1980); *The Changing Cigarette* (1981); *Cancer* (1982); and *Cardiovascular Disease* (1983).

Using computer and microfilm, the Office's Technical Information Center serves researchers by providing literature searches, references, abstracts, and copies of articles. Last year, approximately 4,500 inquiries were received.

In addition, the Center, publishes the periodic *Smoking and Health Bulletin*, an annual cumulation of abstracts of research papers (*Bibliography on Smoking and Health*), the biennial *Directory of Ongoing Research in Smoking and Health*, and an annual summary of legislative actions (*State Legislation on Smoking and Health*).

The Office is responsible for analyzing scientific information for the purpose of maintaining Federal smoking policies. It is one of four centers serving the bibliographic needs of the World Health Organization on smoking and health.

The Office develops educational programs and public service announcements targeted to women, ethnic minorities, teens, and children, and disseminates model programs both for preventing teenage smoking and for encouraging smoking cessation.

To be placed on the Office mailing list or to receive further information about its services, write to:

Department of Health and Human Services
Office on Smoking Health
Technical Information Center
5600 Fishers Lane
Park Bldg., Rm. 1–10
Rockville, MD 20857
Telephone: (301) 443-1690

LETTERS TO THE EDITOR

Address correspondence to Editor, New York State Journal of Medicine, *420 Lakeville Road, Lake Success, NY 11042. Letters should be typed double-spaced and must include signature, academic degree, professional affiliation, and address of each author. Preference is given to letters not exceeding 450 words, and every effort will be made to assure prompt publication. All letters are personally acknowledged by the Editor.*

The Fifth World Conference on Smoking and Health

TO THE EDITOR: From July 10 to 15, 1,100 delegates from 80 countries met in Winnipeg to discuss the leading preventable cause of death and disability in the world: tobacco smoking.

Researchers, clinicians, educators, religious leaders, smoking cessation volunteers, politicians, billboard-refacing activists, and nonsmokers' rights advocates met in a remarkable spirit of excitement and optimism. The meetings were permeated by a feeling that at long last there is a worldwide coalition with a common goal: the eradication of smoking.

The Conference recommendations related not only to the health consequences of smoking, but also to socioeconomic aspects, legislation and political action, public education and prevention, and smoking cessation. Included in these recommendations are the following;

- There should be a significant increase in the activities of women's health groups to discourage smoking.
- Research efforts should be intensified on the role of low-tar and -nicotine cigarettes to assess their harmful effects.
- Based on the demonstrated interest and enthusiasm at the Conference, nonsmokers' rights issues should be given appropriate weight in the planning of the Sixth World Conference program in Japan in 1987.
- Data on trends in smoking for as many countries as possible should be made available.
- Research in the area of passive smoking and its effects on health should be increased.
- To help reduce economic dependence on tobacco, countries should request the World Health Organization and the Food and Agricultural Organization to encourage alternatives to tobacco production.
- Activities that explicitly utilize the talents of young people to influence their peer groups should be encouraged.
- Promising approaches to smoking cessation—including physician involvement, behavioral methods, and the electronic media—should be further developed and evaluated in community demonstration projects to examine the effectiveness of an integrated network of activities.

It is hoped that the growing international effort against smoking will not dissipate for lack of funds and participation. The degree of support by the medical profession may hold the key to success.

KURT BAUMGARTNER
Secretary General
Fifth World Conference on
Smoking and Health
Box 8159 Terminal P.O.
Ottawa, Canada K1G3H7

Physician support for passage of New York's Clean Indoor Air Act

TO THE EDITOR: Concern about curtailing fuel costs a decade ago led to major changes in architectural design. The advent of sealed buildings with forced-air ventilation, such as in the newer hospitals and schools, has reduced the rate of exchange of fresh air and has concentrated indoor air pollutants, especially the constituents of tobacco smoke. Minimizing exposure to such pollution is important for all of our patients, especially for children.

A bipartisan measure originally proposed by Assemblyman Pete Grannis (D, Manhattan) and Senator John Dunn (R-C, Garden City) (as well as 61 cosponsors in the Assembly), New York's Clean Indoor Air Act is a well-planned, sensitive, and legally sound bill. Built into the act are provisions that allow for the owners or administrators of most public places to designate certain sections of their facilities as smoking areas. Thus, by accommodating both the smoking and nonsmoking public, no loss of business should occur as a result of this law. Although the Clean Indoor Air Act has been approved by the New York State Assembly four out of the last five years, it has never been allowed out of the Health Committee of the Senate, chaired by Senator Tarky J. Lombardi, Jr. (R-C, Syracuse).

In the face of overwhelming public opinion in favor of such legislation, the influence wielded over our elected officials by the Washington-based Tobacco Institute, the advertising lobby, and certain hotel and restaurant owners is horrifying. It is time for the governor and the Senate to exert leadership in the name of public health and well-being, instead of profits for tobacco companies. It is also time for the Medical Society of the State of New York to make the Clean Indoor Air Act a priority and to assist the State Legislature toward its passage. Until the Legislature does indeed pass the Clean Indoor Air Act, it must be called to account for its failure to fulfill its public health obligation.

Medical societies have been on the defensive of late in dealing with legislation. The Clean Indoor Air Act provides an excellent opportunity for the medical profession in New York State to reassert its leadership in 1984. All physicians should urge their legislators to support this bill and to pass it early in the upcoming session. I look forward to hearing from each and every physician who is prepared to join me in Albany for a bit of first-hand lobbying on behalf of the Clean Indoor Air Act.

JOHN A. MANZARI, MD
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Johnson City, NY 13790

Dr. Manzari is secretary and past president of the New York Chapter of the American College of Chest Physicians.

ASH takes legal action on smoking

TO THE EDITOR: The cigarette is the only product that has been totally above the law—never held responsible for the deaths, disabilities, fires it causes, and never subject to regulation by any federal or state administrative agency. Action on Smoking and Health (ASH) is working to change this situation.

The genesis of ASH came as a result of a decision that I as a recent law school graduate obtained from the Federal

Communications Commission (FCC) in 1967. It ordered broadcasters to apply the "fairness doctrine" to cigarette commercials, that is, to tell the other side of this deadly issue. As a result, over $200 million worth of free broadcast time was made available for antismoking messages; cigarette sales plummeted and cigarette commercials were eventually taken off radio and television.

This did not come about easily, however. The ruling was attacked in court by the tobacco and broadcasting industries, and the FCC was reluctant to enforce its own decision. Moreover, the major national health charities refused to help defend and enforce the decision—even while enjoying all the free publicity from their messages. Why? The reasons include a fear of being denied free broadcast time for other health and fund-raising messages, broadcaster influence on their boards of directors, and an unfounded concern about losing tax-exempt status. Perhaps the major reason was an attitude—still common among health professionals—that the proper and most effective way of fighting disease and dangerous health habits is through research and education.

ASH has demonstrated that legal action can often be far more effective than conventional educational approaches. For instance, in 1969 ASH helped launch the nonsmokers' rights movement by first assembling the scientific evidence showing the health hazards of ambient tobacco smoke, and filing a legal petition with the Civil Aeronautics Board (CAB) calling for separate no-smoking sections on airplanes. The CAB responded favorably, and ten years after the regulation first went into effect, three-fourths of the states and countless municipalities have adopted no-smoking laws. More and more businesses are establishing clean air areas for their employees and customers.

The result has not only been a vastly increased protection for the majority of the population who do not smoke, including the estimated 40 million Americans with emphysema, asthma, hay fever, and other allergies—but also a powerful disincentive to smoking in general.

There are other ways in which legal action can be an effective weapon against smoking. The first successful lawsuit in which a tobacco company will be ordered to pay damages for the death or disability caused to a consumer of cigarettes is not far off. Similarly, legal actions against those who sell cigarettes to minors, who place vending machines within easy reach of children, who promote candy cigarettes in packages very similar to the real thing, or who use the clout of cigarette advertising to kill articles about the health hazards of smoking could be equally effective.

The individual physician can make an important difference. ASH urges all physicians to support the following measures:

- Insist on the adoption and enforcement of rules restricting smoking in hospitals and other health care facilities. Such rules are necessary to protect the health of nonsmoking patients, to reduce the risk of hospital fires, and to uphold the exemplar role of health professionals.
- Advise patients who smoke not only about the risks to their own health, but also about the risks they may cause to the health of others. This is particularly important for parents who smoke around young children, and for mothers-to-be. (Failure to take all reasonable steps to reduce or prevent maternal smoking has already been grounds for legal action.)
- Become involved in local and statewide initiatives to limit smoking in public places by testifying about the serious adverse health effects of ambient tobacco smoke. Expert witnesses from ASH have provided such testimony in numerous local hearings.
- Last, it is vital that physicians and organizations write to the CAB and contact their congressmen to support the recently proposed rules regarding smoking on aircraft, such as the banning of all smoking on flights of less than two hours.

Physicians who wish to learn more about giving testimony or about enforcing their rights as nonsmoking citizens are encouraged to write ASH.

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Cigarette sales practices in New York State urban hospitals

TO THE EDITOR: There are few, if any, compelling medical reasons to permit cigarette smoking in hospitals, much less the sale of cigarettes. Cigarette smoking is the single greatest cause of premature death and disability in the United States. Patients with respiratory allergies and other lung diseases are at greater risk of adverse reactions in the presence of ambient cigarette smoke. For these reasons, and because hospitals are trying to promote themselves as sites for health promotion and health education, it is appropriate that a nonsmoking atmosphere be maintained. A recent nationwide survey, published in 1982,[1] indicated that 30% of all hospitals in the United States sell cigarettes on the premises, a drop from the 56% found in a 1979 survey.

In 1982, I conducted a survey of all hospitals in the six largest cities of New York State (New York, Buffalo, Rochester, Yonkers, Syracuse, and Albany) to determine current practices with regard to the sale of cigarettes. Administrative offices of all 133 hospitals were telephoned and asked to indicate whether cigarettes were sold, and if so, whether by machine, over the counter, or both. A response rate of 100% was achieved.

The number and percent of hospitals reporting cigarette sales, by method of sales, was as follows:

Method of Sales	No.	% of Total Reporting (n = 133)
Machine	20	15
Over the counter	27	20
Machine and over the counter	8	6
Total	55	41

As indicated, 41% of the hospitals sold cigarettes in one or more ways. Over the counter was reported as the most common method of sales. Despite their role in treating tobacco-related illnesses and alleviating suffering and promoting health, it appears that many hospitals in the larger urban areas of the state are not showing leadership in promoting a safe, healthy environment and do not embody positive health behavior.

It is incumbent on the medical staffs of these hospitals to recommend to the governing boards that cigarette sales be eliminated as soon as possible. This is an opportunity for the medical profession to take sensible action.

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(*continued on following page*)

Radioactivity and cigarette smoke

TO THE EDITOR: When a cigarette is smoked, alpha particle-emitting radionuclides are released in the smoke. Both polonium-210 (^{210}Po) with a radioactive half-life of 138 days and lead-210 (^{210}Pb) with a 22-year half-life have been shown to exist in tobacco smoke. These particles are believed by several researchers to be a potential cause of cancer in smokers.[1-3] Such research has led to the postulation of a "warm particle theory" which states that the repeated alpha hits alter the genetic coding of cells while still leaving them able to reproduce in a cancerous manner. Due to the migratory nature and long half-lives of these particles, this theory can help explain the higher incidence of lung cancer in smokers.

Measurements of these two radionuclides in the lungs of smokers show a definite elevation with smoking.[4] The increased dose equivalents to small areas of bifurcations in the bronchial epithelium have been calculated by Little et al[5] as being on the order of 10 rem per year for a two pack per day smoker. Winters and DiFranza[6] have stated that a one and one half pack per day smoker may be getting the equivalent radiation of 300 chest x-rays annually. They state that this dosage would be enough to account for 50% of excess tumors in smokers. These levels of radiation are in stark contrast to the 0.2 rem per year of radiation from all natural background and man-made sources to which the average person is exposed. The maximum yearly dosage recommended by the US government is 0.5 rem, hence the two pack per day smoker could be receiving 20 times the recommended maximum.

Recent studies suggest that tobacco smoke may be the major source of radioactive exposure to the majority of Americans. For example, Black et al[7] have shown that approximately 7% of the radioactivity in tobacco is transferred to the mainstream smoke inhaled by the smoker, while about 30% is transferred to sidestream smoke. Given that the radioactive half-lives of these emitters are relatively long, the cumulative effects of repeated exposure to large concentrations of secondhand smoke could result in nonsmokers' exposure exceeding the government-recommended maximum dosage. Information such as this lends emphasis and support to the drive for nonsmoking sections in public places and the workplace and for additional studies on the actual exposures to many nonsmokers.

Clinical and epidemologic studies on animals and humans have shown strong positive correlations between the increased incidence of cancer and the increased dose of exposure to radiation.[8-12] In addition, these studies have shown a dramatic increase in cancer rates when the control groups studied were also exposed to tobacco smoke. For example, Chameaud et al[8] have concluded, based on animal experiments, that tobacco is a cofactor in carcinogenesis, and Archer[9] concludes that mortality of uranium miners from both lung cancer and other respiratory diseases is strongly dependent on exposure to radon daughters and cigarette smoking. The exact biologic explanation of this synergistic phenomenon is not known; however, the recognition of the existence of alpha particle-emitting radionuclides in tobacco smoke provides a potential answer; ie, the synergism may be caused by the cumulative effects of the two radiation sources.

Exposure to radioactivity from both natural and man-made sources is strictly controlled by the US government in order to minimize risk, yet the exposure to radioactivity from tobacco smoke is totally unregulated. I believe it is time for the government to apply the same standards to tobacco radiation that it applies to other radiation sources.

Measurements for radiation should be made by the US government on all cigarette brands, and those exposing a smoker to potential harmful levels should be banned. In addition, the government should establish maximum acceptable levels of tobacco radiation in the ambient air in the workplace and promulgate policies to ensure enforcement of these standards. The medical community must take the lead in this effort by proposing such action to the federal government.

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Smokeless tobacco: an unheralded adolescent peril

TO THE EDITOR: Tobacco has been smoked, chewed, and inhaled in various forms in the United States for over 500 years.[1,2] Tobacco that has been processed into a rather coarse, moist powder is known as snuff, and the practice of placing a pinch of snuff between the mucosa of the cheek or lip and the gums is known as snuff dipping. This practice has been a widespread social habit among ranchers and farmers in the western United States for generations. Snuff now appears to be finding its way onto middle school, high school, and college campuses as a socially acceptable habit in the 1980s.

Christen et al[1] have reported that tobacco companies have enjoyed increasing smokeless tobacco sales at the rate of about 11% per year since 1974; it is presently suggested that there are 22 million users of smokeless tobacco in the United States alone.[3] The imprint of the faint circle of the tobacco tin on the back pocket of a pair of jeans is an ominous sign of the times; although teenagers and their parents consider the tobacco habit to be harmless, smokeless tobacco and its by-products seriously irritate sensitive oral tissues. Continued oral use may cause severe periodontal disease, erosion of the teeth, caries, keratotic or erythroplakic muscosal lesions, and possibly oral cancer.

The question of the potential carcinogenicity of smokeless tobacco has received considerable attention in the medical and dental literature, and a host of investigators have examined the possible link between smokeless tobacco and oral cancer.[4,5] Some investigators suggest that there is a cause-and-effect relationship between smokeless tobacco and epithelial dysplasia, although others go so far as to suggest that there is a causal relationship between smokeless tobacco and oral-pharyngeal cancer.[1]

Since the 1950s researchers have been aware of a significant link between smokeless tobacco and a special form of oral cancer known as verrucous carcinoma. Nitrosonornicotine, the first organic carcinogen isolated from unburned tobacco, can be abundantly identified in smoking tobacco, chewing tobacco, and snuff in high concentrations between .03 and 90 $\mu g/g$ of dry tobacco.[2,6]

A study was recently completed at the University of Colorado School of Dentistry in an attempt to determine the prevalence and frequency of oral hard- and soft-tissue alterations associated with the use of smokeless tobacco in a teenage population.[7] A random sampling of 1,119 high school students throughout Colorado showed that 117 were smokeless tobacco users. Four distinct clinical lesions associated with smokeless tobacco use were identified among the students: (1) three stages of clinically discernible hyperkeratotic or erythroplakic lesions of the oral mucous membranes, (2) gingival or periodontal inflammation, (3) a combination of oral soft-tissue lesions and periodontal inflammation, and (4) cervical erosion of the teeth. Over 85% of the users were Caucasian, and use ranged from 1 to 20 "dips" per day with an average duration of use among individuals who had lesions of 3.3 years.

Stringent federal controls exist for the distribution of alcohol, cigarettes and cigars. The labeling and advertising of these tobacco products is rigidly controlled by the US government; no such regulation exists for any form of smokeless tobacco, nor are there any age restrictions for its purchase.

Although in many instances surgery can effect a "cure" for oral cancer, the resultant disfigurement and loss of function are testimony to the fact that whether a carcinogen is packaged in the form of smokeless tobacco or tobacco that can be smoked, there is little doubt that the impact on the US population can be spelled CANCER.

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Women, smoking, and lung cancer in Connecticut

TO THE EDITOR: Lung cancer incidence in women has shown a steady and dramatic increase in Connecticut since 1972, according to data from the Connecticut Tumor Registry. The percentage of women smoking has also been on the rise, as indicated in surveys of smoking habits in the state. In addition, the forecast for the future is that the rise among cancer rates in women will continue into the next decade.

Connecticut's survey data seemed to indicate a slightly higher or equal percentage of female smoking than males. Smoking prevalence in a 1978 household survey (n = 4675) was compared to a second household survey in 1982 (n = 4569)[1] and two smaller telephone surveys (n = 500 for each) in 1981 and 1983[2]. The 1978 survey showed that 36.3% of males and 24% of females were smoking. By the second household survey, the gap between the sexes was closed with 31.2% of males and 31.7% of females smoking. The telephone surveys showed a 5% higher prevalence than the 1982 household survey but this difference is within the 5% confidence interval of the smaller telephone survey samples.

Data from the Connecticut Tumor Registry, the oldest population-based registry in the country (established in 1935), shows that the age-adjusted incidence rate for female lung cancer increased from 20 to 28 per 100,000 women between the two five-year diagnostic periods 1972–1976 and 1977–1981. The number of new female lung cancer cases increased by 50% from 1810 to 2723 between these two time periods. In contrast, new male lung cancer cases increased by 15% with the age-adjusted incidence rate for male lung cancer increasing from 77 to 82 per 100,000 men.

As the number of new lung cancer cases in women has increased in Connecticut between 1972 and 1981, there has been a corresponding increase in the number of deaths from lung cancer. In 1972, 255 women died from lung cancer. During 1980, 467 women died from the disease. The age-adjusted mortality rate for female lung cancer increased from 14 to 22 per 100,000 women between the two years. This represents an increase of 83% in the number of female lung cancer deaths and an increase of 57% in the mortality rate from female lung cancer between 1972 and 1980.

Recent cancer survival data published by the SEER (Surveillance, Epidemiology, and End Results) program of the National Cancer Institute, which includes data from the Connecticut Tumor Registry, shows that only 14% of all women diagnosed as having lung cancer during the period 1973–1979 survived five years or more. The only other cancer site for females which had a worse survival picture was that of the pancreas.

Unless treatment improves survival rates substantially, we can expect to continue to see lung cancer deaths parallel lung cancer incidence rates. Surveys of smoking habits indicated that over 70% of those who smoke have done so for more than 10 years. This leaves a large pool of people at risk because morbidity and mortality rates increase after the first 5 to 15 years of smoking.

If we are to avoid this portent of death and disability, there is only one solution: Getting teenage girls never to start smoking and getting young women to stop smoking must become our number one priority.

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The author wishes to acknowledge the contributions of Patrick Carolan of the Department of Health Services for the statistical data on smoking, Jack Flannery for Tumor Registry data, and Michele Laden, MPH for research assistance.

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[1] Both household surveys were conducted by Yale University with the Department of Health Services under a high blood pressure study grant from the National Heart, Lung, and Blood Institute (#N01-HV-72984).

[2] Both telephone surveys were conducted by the University of Connecticut's Institute of Social Inquiry. The 1981 survey was funded by a risk reduction grant from the Centers for Disease Control (#H11/CCH 100238-03).

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(*continued from page 1230*)

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ROCKLAND

Nephrolithiasis. Jan 3; **Renal Impairment and Selection of Antihypertensive Agents.** Jan 10; **Lithium Physiology and Pathology.** Jan 17; **Use of Renal Scan and Ultrasound in Kidney Disease.** Jan 24. Information: Clinical Department Director's Office, Nyack Hospital, North Midland Ave Nyack, NY 10960. Tel: (914) 358-6200 Ext 2509.

NASSAU

"Potpourri" of Gastro-Intestinal Radiology. Jan 31. Information: R. Pochaczevsky, MD, Dept of Radiology, Long Island Jewish-Hillside Medical Center, New Hyde Park, NY 11042. Tel: (212) 470-2420.

Medical/Surgical Tumor Board. Through June 25. Information: James Wing, MD Nassau County Medical Center, E Meadow, NY 11554. Tel: (516) 542-3896.

Pediatric Endocrinology. Through June. Information: Mariano Castro-Magana, MD, Nassau County Medical Center, East Meadow, NY 11554. Tel: (516) 542-2398

Continuing OB/GYN Education. Perinatal Mortality Conference. Jan 17; **The Malpractice Crunch.** Jan 24; **The Breast Pump.** Jan 31. Information: Mary Leong, MD, Assistant Director of Gynecology, Nassau County Medical Center, 2201 Hempstead Turnpike, East Meadow, NY 11554. Tel: (516) 542-2256.

Topics in Perinatal Medicine: Neonatal Screening of Inborn Errors of Metabolism. Jan 6; **Hepatitis and its Perinatal Implication.** Jan 13; **Clinical Pathological Conference.** Jan 20; **Developmental Follow-Up.** Jan 27. Information: Nergesh Tejani, MD. Obstetrics and Gynecology, Nassau County Medical Center, 2201 Hempstead Turnpike, E. Meadow, NY 11554. Tel: (516) 542-2257.

Children of Parents with Manic Depressive Illness. Jan 6; **Current Clinical Problems in Geriatric Psychiatry.** Jan 13; **Learning Theory Approaches to Development.** Jan 20; **Current Concepts in Sex Therapy.** Jan 27. Information: Clement Boccalini, MD, Nassau County Medical Center, East Meadow, NY. Tel: (516) 542-0123.

SUFFOLK

Neonatology Lecture Series-Intraventricular Hemorrhage in the Newborn. Jan 3; **Pediatric Adolescent Medicine Lecture Series-The Body's Defense Against Infection.** Jan 10. Huntington Hospital. Information: Arthur Schwager, MD. Tel: (516) 427-0530.

AROUND THE NATION

ARIZONA

Innovations in Diagnostic Imaging: Ditigal, NMR, CT and Nuclear Medicine. Jan 23–26. University of Arizona College of Medicine and Health Sciences Center, Tucson. Information: Educational Resources Associates, Inc., PO Box 369, Brookline, MA. 02146. Tel: (617) 738-8859.

CALIFORNIA

Topics in Fetal-Maternal Medicine. Jan 11–15. Palm Desert. Information: Clinton H. Dowd, MD, Institute for Continuing Medical Education, Hurley Medical Center, One Hurley Plaza, Flint, MI 48502. Tel: (313) 257-9142.

COLORADO

Current Concepts in Cardiology. Jan 30–Feb 4. Coronado. Information: Ronald J. Sanchez, American College of Cardiology, 9111 Old Georgetown Road, Bethesda, MD. 20814. Tel: (301) 897-5400.

HAWAII

The 2nd Biannual Gastrointestinal and Hepatic Diseases Conference. Jan 13–16; **8th Annual Hawaii Echocardiography Conference.** Jan 23–27. Information: Yvonne Brewer, MPH, Education Director, The Honolulu Medical Group Research and Education Foundation, 550 South Beretania St. Honolulu, HI. Tel: (808) 537-2211, ext. 751.

MASSACHUSETTS

Advanced Trauma Life Support Courses. Jan 12–13. Longwood Area Trauma Center, Boston, MA. Information: Theresa Gaffney, RN, Beth Israel Hospital, Rabb 322, 330 Brookline Avenue, Boston, MA 02215. Tel: (617) 735-4228.

An Intensive Review: Adult and Pediatric Allergy. Jan. 23–27. New England Deaconess Hospital, Boston. Information: Mary Fogarty, The American Academy of Allergy and Immunology 611 E. Wells St., Milwaukee, WI 53202. Tel: (414) 272-6071.

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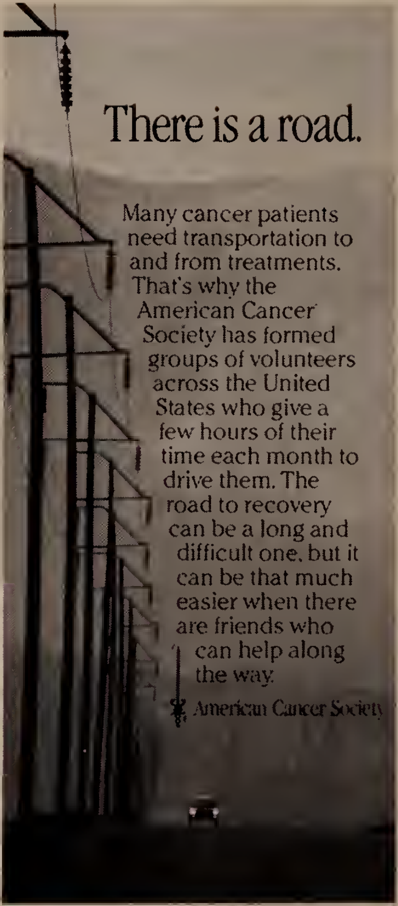
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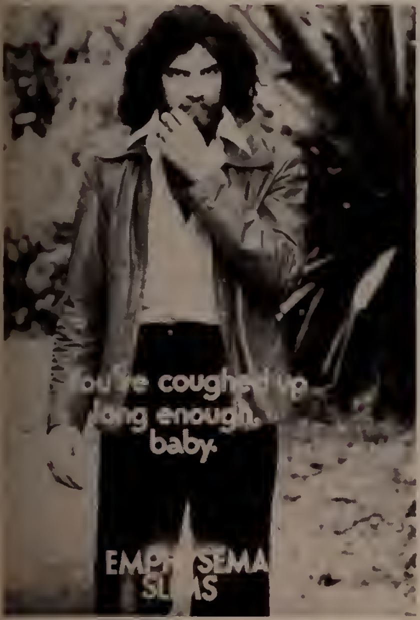
For information: Thomas Houston, MD, President, DOC, Floyd Medical Center, 304 Turner-McCall Blvd, Rome GA 30161.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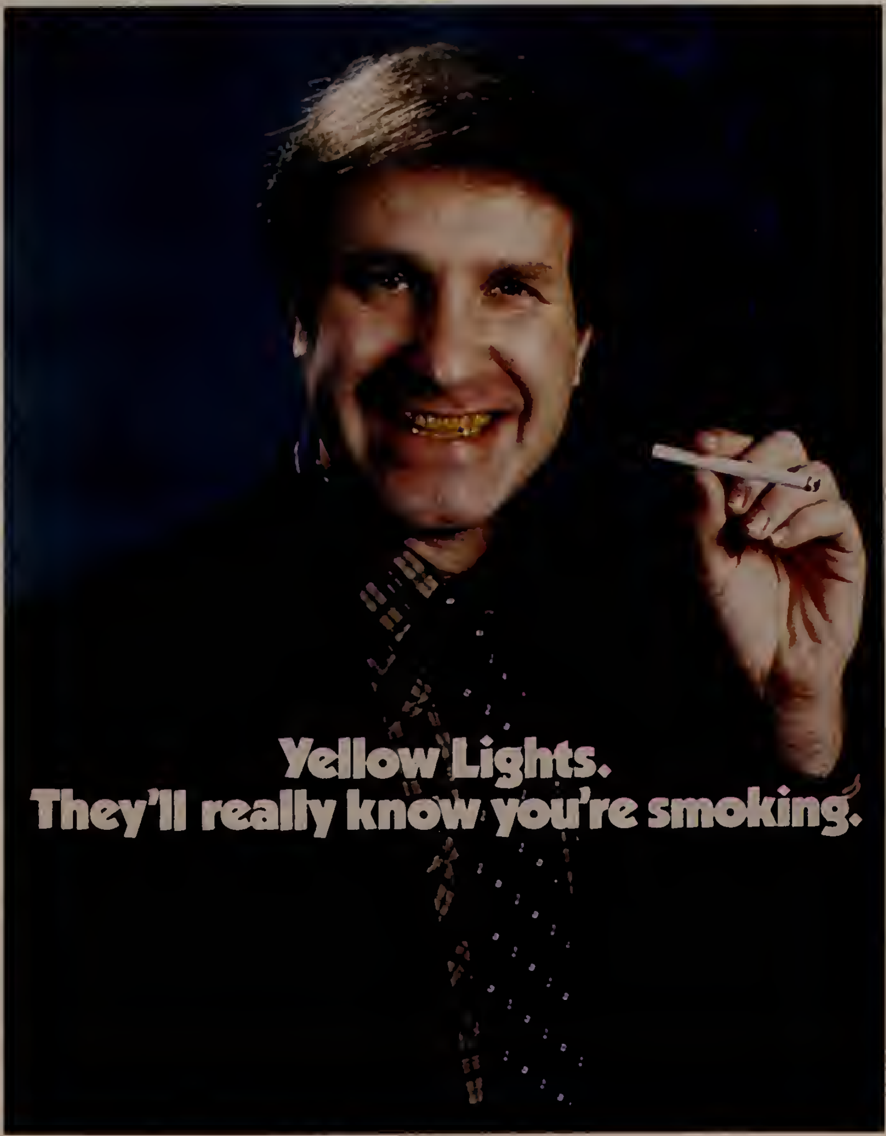
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Dosage may be increased to 120 mg or 160 mg once daily as needed to achieve additional control. When converting patients from other beta blockers, including INDERAL tablets, start with the nearest milligram equivalent of INDERAL LA once daily and evaluate clinical results to determine if dosage adjustment is necessary. For arrhythmias, use conventional INDERAL (propranolol HCl) tablets.

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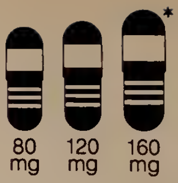

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INDERAL® LA BRAND OF propranolol hydrochloride
(Long Acting Capsules)

DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules

CLINICAL PHARMACOLOGY. INDERAL is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.

The mechanism of the antihypertensive effect of INDERAL has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta-blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.

INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL

WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

> IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA. Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS. General: Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

Central Nervous System: lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION—*Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—*Dosage must be individualized.* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—*Dosage must be individualized.* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily.

PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use

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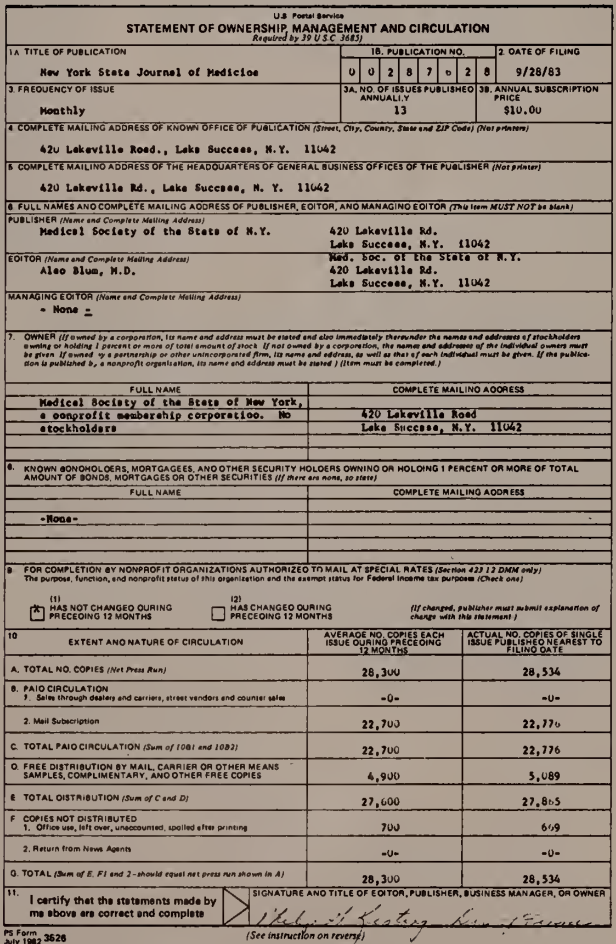

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1A. TITLE OF PUBLICATION New York State Journal of Medicine	1B. PUBLICATION NO. 0 0 2 8 7 6 2 8	2. DATE OF FILING 9/28/83
3. FREQUENCY OF ISSUE Monthly	3A. NO. OF ISSUES PUBLISHED ANNUALLY 13	3B. ANNUAL SUBSCRIPTION PRICE $10.00

4. COMPLETE MAILING ADDRESS OF KNOWN OFFICE OF PUBLICATION *(Street, City, County, State and ZIP Code) (Not printers)*
420 Lakeville Road., Lake Success, N.Y. 11042

5. COMPLETE MAILING ADDRESS OF THE HEADQUARTERS OF GENERAL BUSINESS OFFICES OF THE PUBLISHER *(Not printer)*
420 Lakeville Rd., Lake Success, N. Y. 11042

6. FULL NAMES AND COMPLETE MAILING ADDRESS OF PUBLISHER, EDITOR, AND MANAGING EDITOR *(This item MUST NOT be blank)*

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Medical Society of the State of N.Y. 420 Lakeville Rd.
Lake Success, N.Y. 11042

EDITOR *(Name and Complete Mailing Address)*
Alan Blum, M.D. Med. Soc. of the State of N.Y.
420 Lakeville Rd.
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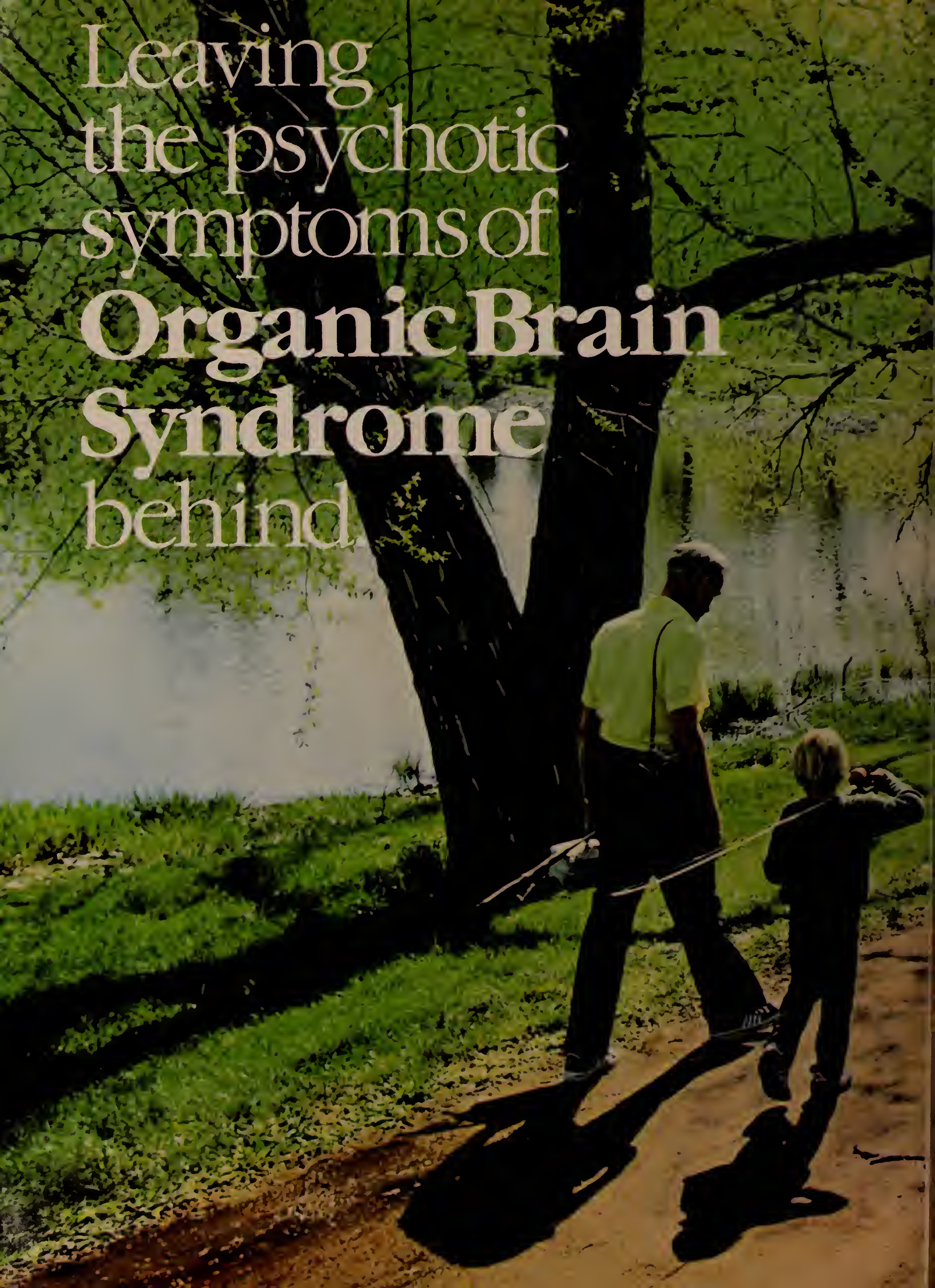

Leaving
the psychotic
symptoms of
Organic Brain
Syndrome
behind.

Effective

Treatment with Navane can produce improvement in psychotic symptoms such as hallucinatory behavior and unusual thought content as well as hostility, disorientation and depressive mood,[1,2] leaving the elderly patient more alert[2] and better able to participate in the activities of family life.

Well tolerated

Navane is generally well tolerated by elderly patients. Excessive sedation or drowsiness has been reported, but is uncommon.[1] Anticholinergic effects[3] and hypotension[4,5] are reported, but rarely. Should they occur, extrapyramidal symptoms can usually be readily controlled.

Navane®

(thiothixene) (thiothixene HCl)

Capsules 1 mg, 2 mg, 5 mg, 10 mg, 20 mg
Concentrate 5 mg/ml Intramuscular 2 mg/ml, 5 mg/ml

See following page for a brief summary of prescribing information.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
at the forefront of psychopharmacology

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Navane®

(thiothixene) (thiothixene HCl)

References: 1. Util TM, Unverdi C, Wohlrade J, et al: Drug therapy of psychosis associated with organic brain syndrome. Presented as a Scientific Exhibit at the American Public Health Association Centennial, Atlantic City, New Jersey, November 12-16, 1972. 2. Katz MM, Util TM: Video methodology for research in psychopathology and psychopharmacology. *Arch Gen Psychiatry* 31:204-210, 1974. 3. Ketai R: Psychotropic drugs in the management of psychiatric emergencies. *Postgraduate Medicine* 58:87-93, 1975. 4. Birkett DP, Hirschfield W, Simpson GM Thiothixene in the treatment of diseases of the senium. *Curr Ther Res* 14:775-779, 1972. 5. Data on file at Roerig.

BRIEF SUMMARY OF PRESCRIBING INFORMATION
Navane® (thiothixene) Capsules: 1 mg, 2 mg, 5 mg, 10 mg, 20 mg
(thiothixene hydrochloride) Concentrate: 5 mg/ml, Intramuscular: 2 mg/ml, 5 mg/ml

Contraindications: Navane (thiothixene) is contraindicated in patients with circulatory collapse, comatose states, central nervous system depression due to any cause, and blood dyscrasias Navane is contraindicated in individuals who have shown hypersensitivity to the drug. It is not known whether there is a cross-sensitivity between the thioxanthenes and the phenothiazine derivatives, but the possibility should be considered

Warnings: *Usage in Pregnancy*—Safe use of Navane during pregnancy has not been established Therefore, this drug should be given to pregnant patients only when, in the judgment of the physician, the expected benefits from the treatment exceed the possible risks to mother and fetus Animal reproduction studies and clinical experience to date have not demonstrated any teratogenic effects.

In the animal reproduction studies with Navane, there was some decrease in conception rate and litter size, and an increase in resorption rate in rats and rabbits, changes which have been similarly reported with other psychotropic agents After repeated oral administration of Navane to rats (5 to 15 mg/kg/day), rabbits (3 to 50 mg/kg/day), and monkeys (1 to 3 mg/kg/day) before and during gestation, no teratogenic effects were seen. (See Precautions)

Usage in Children—The use of Navane in children under 12 years of age is not recommended because safety and efficacy in the pediatric age group have not been established

As is true with many CNS drugs, Navane may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery, especially during the first few days of therapy. Therefore, the patient should be cautioned accordingly.

As in the case of other CNS-acting drugs, patients receiving Navane should be cautioned about the possible additive effects (which may include hypotension) with CNS depressants and with alcohol.

Precautions: An antiemetic effect was observed in animal studies with Navane, since this effect may also occur in man, it is possible that Navane may mask signs of overdosage of toxic drugs and may obscure conditions such as intestinal obstruction and brain tumor.

In consideration of the known capability of Navane and certain other psychotropic drugs to precipitate convulsions, extreme caution should be used in patients with a history of convulsive disorders or those in a state of alcohol withdrawal since it may lower the convulsive threshold Although Navane potentiates the actions of the barbiturates, the dosage of the anticonvulsant therapy should not be reduced when Navane is administered concurrently.

Caution as well as careful adjustment of the dosage is indicated when Navane is used in conjunction with other CNS depressants other than anticonvulsant drugs.

Though exhibiting rather weak anticholinergic properties, Navane should be used with caution in patients who are known or suspected to have glaucoma, or who might be exposed to extreme heat, or who are receiving atropine or related drugs.

Use with caution in patients with cardiovascular disease.

Also, careful observation should be made for pigmentary retinopathy, and lenticular pigmentation (fine lenticular pigmentation has been noted in a small number of patients treated with Navane for prolonged periods). Blood dyscrasias (agranulocytosis, pancytopenia, thrombocytopenic purpura), and liver damage (jaundice, biliary stasis) have been reported with related drugs.

Undue exposure to sunlight should be avoided Photosensitive reactions have been reported in patients on Navane.

Neuroleptic drugs elevate prolactin levels; the elevation persists during chronic administration. Tissue culture experiments indicate that approximately one-third of human breast cancers are prolactin dependent *in vitro*, a factor of potential importance if the prescription of these drugs is contemplated in a patient with a previously detected breast cancer. Although disturbances such as galactorrhea, amenorrhea, gynecomastia, and impotence have been reported, the clinical significance of elevated serum prolactin levels is unknown for most patients. An increase in mammary neoplasms has been found in rodents after chronic administration of neuroleptic drugs. Neither clinical studies nor epidemiologic studies conducted to date, however, have shown an association between chronic administration of these drugs and mammary tumorigenesis, the available evidence is considered too limited to be conclusive at this time.

Intramuscular Administration—As with all intramuscular preparations, Navane Intramuscular should be injected well within the body of a relatively large muscle. The preferred sites are the upper outer quadrant of the buttock (i.e gluteus maximus) and the mid-lateral thigh.

The deltoid area should be used only if well developed, such as in certain adults and older children, and then only with caution to avoid radial nerve injury. Intramuscular injections should not be made into the lower and mid-thirds of the upper arm. As with all intramuscular injections, aspiration is necessary to help avoid inadvertent injection into a blood vessel.

Adverse Reactions: *Note:* Not all of the following adverse reactions have been reported with Navane (thiothixene) However, since Navane has certain chemical and pharmacologic similarities to the phenothiazines, all of the known side effects and toxicity associated with phenothiazine therapy should be borne in mind when Navane is used.

Cardiovascular effects: Tachycardia, hypotension, lightheadedness, and syncope. In the event hypotension occurs, epinephrine should not be used as a pressor agent since a paradoxical further lowering of blood pressure may result. Nonspecific EKG changes have been observed in some patients receiving Navane These changes are usually reversible and frequently disappear on continued Navane therapy. The incidence of these changes is lower than that observed with some phenothiazines. The clinical significance of these changes is not known

CNS effects. Drowsiness, usually mild, may occur although it usually subsides wtih continuation of Navane therapy. The incidence of sedation appears similar to that of the piperazine group of phenothiazines, but less than that of certain aliphatic phenothiazines. Restlessness, agitation and insomnia have been noted with Navane (thiothixene). Seizures and paradoxical exacerbation of psychotic symptoms have occurred with Navane infrequently

Hyperreflexia has been reported in infants delivered from mothers having received structurally related drugs

In addition, phenothiazine derivatives have been associated with cerebral edema and cerebrospinal fluid abnormalities

Extrapyramidal symptoms, such as pseudo-parkinsonism, akathisia, and dystonia have been reported Management of these extrapyramidal symptoms depends upon the type and severity Rapid relief of acute symptoms may require the use of an injectable antiparkinson agent. More slowly emerging symptoms may be managed by reducing the dosage of Navane and/or administering an oral antiparkinson agent.

Persistent Tardive Dyskinesia: As with all antipsychotic agents tardive dyskinesia may appear in some patients on long term therapy or may occur after drug therapy has been discontinued. The risk seems to be greater in elderly patients on high-dose therapy, especially females The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear

Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked

It has been reported that fine vermicular movements of the tongue may be an early sign of the syndrome and if the medication is stopped at that time, the syndrome may not develop.

Hepatic effects: Elevations of serum transaminase and alkaline phosphatase, usually transient, have been infrequently observed in some patients. No clinically confirmed cases of jaundice attributable to Navane (thiothixene) have been reported.

Hematologic effects: As is true with certain other psychotropic drugs, leukopenia and leukocytosis, which are usually transient, can occur occasionally with Navane. Other antipsychotic drugs have been associated with agranulocytosis, eosinophilia, hemolytic anemia, thrombocytopenia and pancytopenia

Allergic reactions: Rash, pruritus, urticaria, photosensitivity and rare cases of anaphylaxis have been reported with Navane. Undue exposure to sunlight should be avoided. Although not experienced with Navane, exfoliative dermatitis and contact dermatitis (in nursing personnel) have been reported with certain phenothiazines.

Endocrine disorders: Lactation, moderate breast enlargement and amenorrhea have occurred in a small percentage of females receiving Navane. If persistent, this may necessitate a reduction in dosage or the discontinuation of therapy. Phenothiazines have been associated with false positive pregnancy tests, gynecomastia, hypoglycemia, hyperglycemia, and glycosuria

Autonomic effects: Dry mouth, blurred vision, nasal congestion, constipation, increased sweating, increased salivation, and impotence have occurred infrequently with Navane therapy. Phenothiazines have been associated with miosis, mydriasis, and adynamic ileus.

Other adverse reactions: Hyperpyrexia, anorexia, nausea, vomiting, diarrhea, increase in appetite and weight, weakness or fatigue, polydipsia and peripheral edema

Although not reported with Navane, evidence indicates there is a relationship betwee phenothiazine therapy and the occurrence of a systemic lupus erythematosus-like syndrome.

NOTE: Sudden deaths have occasionally been reported in patients who have received certain phenothiazine derivatives. In some cases the cause of death was apparently cardiac arrest or asphyxia due to failure of the cough reflex In others, the cause could not be determined nor could it be established that death was due to phenothiazine administration.

Dosage and Administration: Dosage of Navane should be individually adjusted depending on the chronicity and severity of the condition. In general, small doses should be used initially and gradually increased to the optimal effective level, based on patient response.

Some patients have been successfully maintained on once-a-day Navane therapy.

Usage in children under 12 years of age is not recommended because safe conditions for its use have not been established.

Navane Intramuscular Solution: Navane For Injection—Where more rapid control and treatment of acute behavior is desirable, the intramuscular form of Navane may be indicated It is also of benefit where the very nature of the patient's symptomatology, whether acute or chronic, renders oral administration impractical or even impossible.

For treatment of acute symptomatology or in patients unable or unwilling to take oral medicatio the usual dose is 4 mg of Navane Intramuscular administered 2 to 4 times daily. Dosage may b increased or decreased depending on response. Most patients are controlled on a total da dosage of 16 to 20 mg The maximum recommended dosage is 30 mg/day An oral form shou supplant the injectable form as soon as possible. It may be necessary to adjust the dosage whe changing from the intramuscular to oral dosage forms. Dosage recommendations for Navan (thiothixene) Capsules and Concentrate appear in the following paragraphs.

Navane Capsules: Navane Concentrate—In milder conditions, an initial dose of 2 mg three times daily If indicated, a subsequent increase to 15 mg/day total daily dose is often effective

In more severe conditions, an initial dose of 5 mg twice daily.

The usual optimal dose is 20 to 30 mg daily. If indicated, an increase to 60 mg/day total daily dose is often effective. Exceeding a total daily dose of 60 mg rarely increases the beneficial response

Overdosage: Manifestations include muscular twitching, drowsiness, and dizziness. Symptoms of gross overdosage may include CNS depression, rigidity, weakness, torticollis, tremor, salivation, dysphagia, hypotension, disturbances of gait, or coma

Treatment. Essentially is symptomatic and supportive. For Navane oral, early gastric lavage is helpful. For Navane oral and Intramuscular, keep patient under careful observation and maintain an open airway, since involvement of the extrapyramidal system may produce dysphagia ar respiratory difficulty in severe overdosage. If hypotension occurs, the standard measures fo managing circulatory shock should be used (I.V. fluids and/or vasoconstrictors.)

If a vasoconstrictor is needed, levarterenol and phenylephrine are the most suitable drugs Other pressor agents, including epinephrine, are not recommended, since phenothiazine derivatives may reverse the usual pressor action of these agents and cause further lowering of the blood pressure.

If CNS depression is present and specific therapy is indicated, recommended stimulants include amphetamine, dextroamphetamine, or caffeine and sodium benzoate Stimulants that may cause convulsions (e.g picrotoxin or pentylenetetrazol) should be avoided. Extrapyramidal symptoms may be treated with antiparkinson drugs

There are no data on the use of peritoneal or hemodialysis, but they are known to be of little value in phenothiazine intoxication.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals

NEW YORK STATE JOURNAL OF MEDICINE

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Volume 83
January–December
1983

Editor:
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Deputy Editor:
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Published by the
MEDICAL SOCIETY OF THE STATE OF NEW YORK
PO Box 5404
420 Lakeville Road
Lake Success, NY 11042

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CLASSIFICATION CODES

CN = Contemporary Nutrition
CNT = Clinical Note
CPC = Clinicopathologic Conferences
CR = Case Reports
DI = Drug Information
ED = Editorials
GER = Geriatrics
HIST = History of Medicine
HYP = Hypertension
ID = Infectious Diseases
IHN = Interesting Historical Notes
LE = Letters to the Editor
PH = Public Health News
RPC = Correlation Conferences in Radiology and Pathology
SH = School Health
SPEC = What's New in Specialties?

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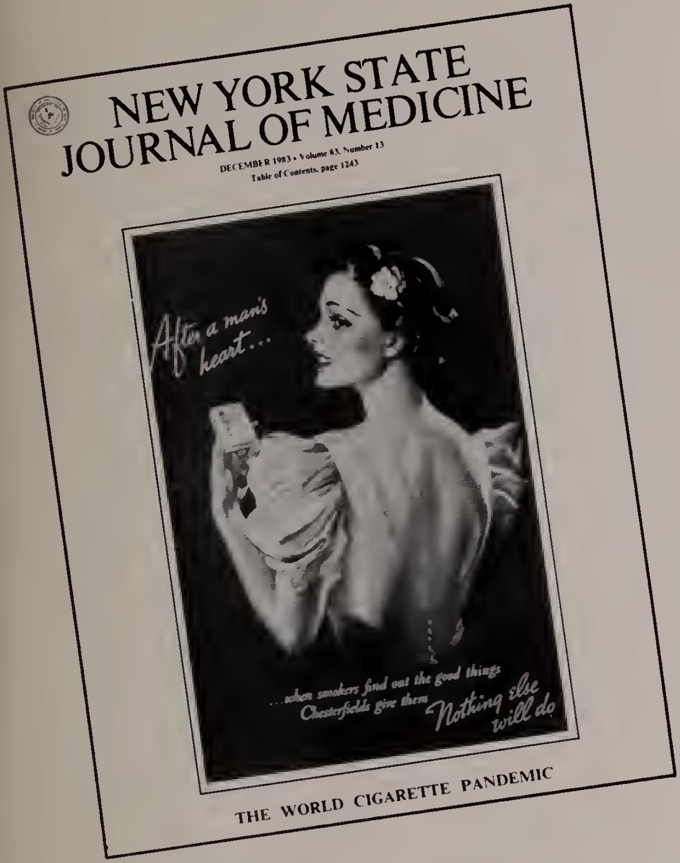

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